

## **Owner's Manual** **LGR 7000XLi Dehumidifier**

Original Instructions

Models F412-230V EU & F412-110V UK

**LEGEND BRANDS HOLDINGS LTD.**

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**Dri-Eaz® dehumidifiers reduce humidity in enclosed environments by removing water vapor from the air. This unit is rugged, durable and highly portable, making it ideal for water damage restoration, structural drying, construction, and other applications requiring temporary, high-performance dehumidification.**

Patents: <http://www.LBpatents.com>

### **READ THESE INSTRUCTIONS**

#### **SAFETY INSTRUCTIONS**



**WARNING! Do not alter or modify your dehumidifier in any way. Use only replacement parts authorized by Dri-Eaz Products, Inc. Modifications or use of unapproved parts could create a hazard and will void your warranty. Contact your authorized distributor for assistance.**

**WARNING! Electric shock hazard, rotating fan hazard and hot surface hazards.**

- Inspect the power cord before use. If cord is damaged, do not use. Always grasp the plug (not the cord) to unplug.
- Must be earthed. Insert three-prong plug on power cord into a matching electrically earthed outlet. Do not use adapter. Never cut off third prong. Do not use an extension cord.
- The unit must be operated on a 230V or 110V outlet (as appropriate) circuit protected by a Residual Current Device device.
- Keep motor and wiring dry.
- Always unplug unit before cleaning or servicing.
- Do not attempt to repair the unit. For service, contact your local distributor.

#### **FIRE HAZARD**

- Keep away from open flames and heat sources.
- Do not use or store where vapors from gasoline, solvents, thinners or other flammable materials may be present.

#### **BEFORE YOU BEGIN**

##### **Warranty registration**

Warranty registration procedures vary by country/market. Contact your local distributor for assistance. Registration allows us to better assist you with using, maintaining or servicing your equipment and to contact you in case we have important safety information concerning your Dri-Eaz product. If you determine service is required, have your equipment model, serial number and original proof of purchase available and ask for assistance with obtaining a return material authorization (RMA).

##### **GROUNDING INSTRUCTIONS**

This unit's plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

**WARNING! Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlets are properly grounded. Do not modify the plugs provided with the appliance – if the plugs do not fit the outlets, have proper outlets installed by a qualified electrician.**

This equipment is for use on circuits with a nominal rating of no more than 230V or 110V (as appropriate).

##### **Handle the unit carefully**

Always operate the unit on a stable, level surface. Do not drop, throw, or place where it could fall. Rough treatment can damage the unit, and may create a hazardous condition or void the warranty.

This unit intended for household and commercial use.

# CONTROLS AND OPERATING INSTRUCTIONS

## Set unit upright

**NOTICE:** Always store, transport, and use the unit in a horizontal position. If the unit is ever placed in a vertical position, return it to the horizontal position and let it stand for at least 30 minutes before turning it on.

## Positioning a Dehumidifier

For best results, operate your dehumidifiers in an enclosed area. Close all doors and windows that open to the outside to maximize water removal efficiency. Place

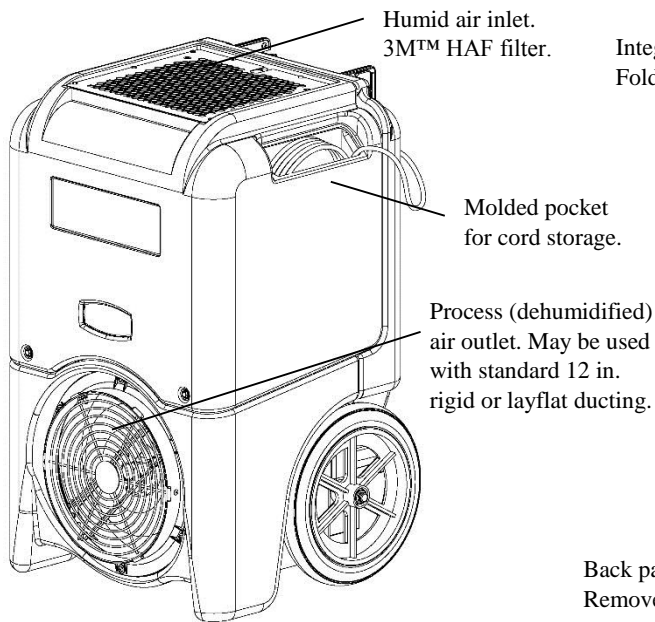
your dehumidifier away from obstructions, and keep it away from anything that could block airflow into and out of the unit. For more information about creating an optimum drying environment, contact your local distributor.

## Set up drain hose

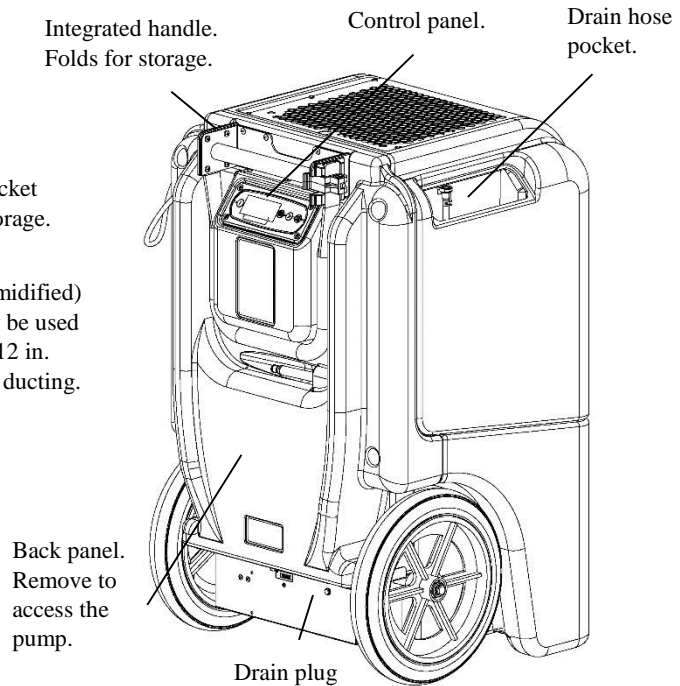
The condensate pump connects to a plastic drainage hose. This hose is equipped with a quick-connect fitting for quick attachment to the provided 12 m drain hose. Unwrap the entire hose and place the unattached end in a sink, drain, bucket or outdoors – anywhere that water can drain out safely. If you use a bucket or other container for water collection, check it regularly to prevent overflows.

# PARTS IDENTIFICATION

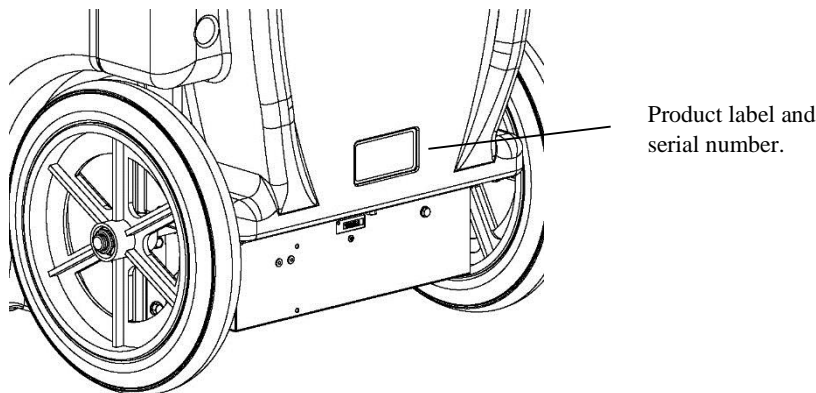
**FIG. A: FRONT**



**FIG. B: REAR**



**FIG. C: PRODUCT LABEL**



**NOTICE:** Uncoil and straighten the entire drain hose. Do not leave any part of the hose coiled and do not place the end of the hose higher than 6 m above the bottom of the unit. Also check for kinks or other obstructions that might restrict the flow of water. Obstructions may cause a water backup and result in overflows.

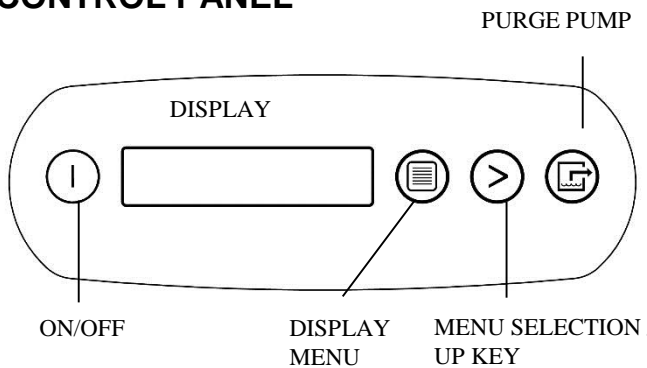
## Plug in electrical cord

The 110V UK unit should be plugged into a 5kVA transformer box. The 230V unit should be plugged into an appropriate outlet.

### Startup display and normal display modes

When unit is first plugged in to AC power, the control panel display will briefly cycle through a series of readouts. This is part of the unit's self-diagnosis procedure and no user intervention is required.

## CONTROL PANEL



ON/OFF	Press and release to turn unit on or off.
DISPLAY MENU	Press to select next item in menu. Menu item will show in display.
MENU SELECTION / UP KEY	Press to toggle or select values in menu displayed.
PURGE PUMP	Press and release to start purge. Display will count down seconds remaining until purge is complete.

### Startup display and normal display modes

When unit is first plugged in to AC power, the control panel display will briefly cycle through a series of readouts. This is part of the unit's self-diagnosis procedure and no user intervention is required.

Once the self-diagnosis is complete, the display will switch to **normal display mode**.

## Turn the unit on

The control panel has a display and a touchpad with four keys. Press the ON/OFF to turn the unit on. The unit will now go through a compressor delay countdown (up to sixty seconds in duration) and a self diagnostics process.

Once the compressor delay countdown and self-diagnostics are complete, the display will switch to **normal display mode**.

**UNIT ON 00 HRS**  
**INLET 00°C / INLET 00%**

The **first line** of the display shows the total number of hours the unit has been in operation. This value may be reset to zero to track job hours (see "Job Hours Reset" below). The **second line** of the display alternates between inlet temperature and inlet humidity.

### User Settings Menu

A number of display settings may be changed by the user. System information can also be displayed. These items are accessed by pressing DISPLAY MENU. Each press of the key will display the next parameter. When you reach the parameter you wish to adjust, press MENU SELECTION to increase the value. Press DISPLAY MENU again to accept the setting and re-start the display cycle.

Note that only menu items followed by a greater-than symbol (>) may be adjusted.

### Error messages

If the onboard diagnostics discover a problem, the unit will display an error message. See "Error Messages," p. 9, for an explanation of each message.

## Control Panel Guide



**ON/OFF.** Press to turn the unit on or off. When the machine is turned on, the display normally reads PLEASE WAIT COMP. DELAY and performs a numeral countdown for a maximum of 60 seconds to 0. This delay allows time for refrigerant pressures to equalize for easier starting. Once the unit completes the compressor delay, the display shows UNIT ON XX HRS and cycles between INLET XX°F and INLET XX%. NOTE: If no compressor delay countdown is displayed, a delay is not necessary and the machine will begin operation immediately.


**DISPLAY MENU.** Press to cycle through the display of additional dehumidifier conditions and User Settings. To return to the main menu, press the ON/OFF key once.

**MENU SELECTION.** Press to change the values of the "User Defined" settings. The MENU SELECTION key acts as the UP key for adjusting the setpoint for Humidistat mode operation. See User Settings Menu (below) for details.

**PURGE.** Press to empty water from the condensate pump reservoir. The display will read PUMP PURGING with a numeral countdown. NOTE: During normal operation, the pump purges automatically.

### Changing settings and viewing system information

Display setting changes and system information can be accessed by pressing  DISPLAY MENU. Each press of the key will display the next parameter (see list below). When you reach the parameter you wish to adjust, press  MENU SELECTION to increase the

value. Press  DISPLAY MENU again to accept the setting and re-start the display cycle




Note that only menu items followed by a greater-than symbol (>) may be adjusted.


## USER SETTINGS


Only menu items followed by a greater-than symbol (>) may be adjusted. If no keys are selected for 5 minutes on screens: INLET OUTLET, GRAIN DPR (INLET-OUTLET for 230V models), the display will return to normal display mode. In all the other menu items, the display will return to the normal display mode after 20 seconds. Items without the symbol (>) are for information only and cannot be changed or reset.




Press  **DISPLAY MENU** to proceed to the next menu item. ↓




Press  **MENU SELECTION** to change the setting. →




 1. JOB HRS RESET > PWR INTERRUPT X  1. JOB HR RESET 0 PWR INTERRUPT 0 *Press  to reset to 0.*




 2. INLET OUTLET 100' 80% 115' 30% *For information only.*






 3. GRAIN DPR XX GPP *( XX.X g/kg for 230V models )*




 4. FILTER CLEANED XXX HRS >  5. FILTER CLEANED 0 HRS *Press  to clear filter hours.*


 5. COIL CLEANED XXX HRS >  5. COIL CLEANED 0 HRS *Press  to clear coil hours.*


 6. HUMIDISTAT MODE OFF >  6. HUMIDISTAT MODE ON > *Press  to turn ON or OFF.*


 7. HUMIDISTAT SETPOINT XX% >  *Press  to cycle through 40%–90% at 5% increments (default is 50%).*


 8. LANGUAGE ENGLISH >  8. IDIOMA ESPANOL >  8. SPRACHE DEUTSCH >  8. LANGUE FRANCAIS > *Press  to change language options.*


 9. TEMP UNITS 'F' >  9. TEMP UNITS 'C' > *Press  to change to °F or °C.*

 10. COIL TEMP XX' *For information only.*


 11. COMP CURRENT XX.X A *For information only.*


 12. FIRMWARE 3.0X FXXX-XXX *For information only.*

 13. LIFE HOURS XXXX HRS

 (Returns to top menu item.)

*The following section available only on wireless-equipped units.*

 14. SENSOR ID XXXXXXXX

 (Returns to top menu item.)

## AT THE END OF THE JOB

To reduce the possibility of drips when moving the unit, follow these additional steps to ensure that all water is removed from the unit.

NOTICE: To ensure all water is removed from the dehumidifier, the unit will complete the defrost cycle even if the unit is turned off. If the unit is unplugged during the defrost cycle, excessive water may accumulate in the unit and may drip out when you move the unit. If the defrost cycle is interrupted in this way, note that the unit will display the message POWER FAILURE the next time it is powered up. To clear the message, press the MENU SELECTION key.

NOTICE: To ensure the condensate tank empties completely while purging, make sure the unit is placed upright on a horizontal surface.

**1. If the unit is in a defrost cycle, wait until the unit has returned to normal operating mode before proceeding. To check, review the control panel. The control panel will show one of the following:**

*Defrost in progress:*

**UNIT ON 00 HRS  
DEFROST XX**

Display mode when unit is in defrost mode. XX indicates the seconds remaining on the defrost cycle.

*Shutdown Sequence*

**WAIT FOR  
DEFROST XX**

Display mode when unit in defrost and unit is powered down (shut off by user). Unit will complete the defrost cycle to remove any built-up ice then purge the pump. XX indicates the seconds remaining on the defrost cycle.

*Drying Sequence*


**WAIT FOR  
UNIT DRYING XX**

Display mode when unit not in defrost and unit is powered down (shut off by user). Unit will complete the 5 minute drying cycle then purge the pump. XX indicates the seconds remaining on the drying cycle.

*Normal Display:*

**UNIT ON 00 HRS  
INLET XX° C**

Wait until the control shows the normal display before proceeding.

- 2. Gently rock the machine to ensure any water remaining on interior surfaces falls into the sump area.**
- 3. Press the  PURGE key. When the purge cycle is complete, turn the unit off.**
- 4. Remove the external drain hose, drain it carefully, coil it and secure it with one of the straps provided on the side of the unit.**
- 5. Unplug power cord from power supply, coil neatly, coil it and secure it in the cord storage pocket (see Fig. A).**

## TRANSPORTATION AND STORAGE

**NOTICE:** Handle the unit carefully. Do not drop, throw, or place the unit where it could fall. Rough treatment can damage this equipment and may create a hazardous condition or void warranty.

- Do not expose the control panel to moisture, snow or rain.
- Protect from freezing.
- Store and transport securely to avoid any damaging impact to internal parts.
- Secure during transport to prevent sliding and possible injury to vehicle occupants.

## MAINTENANCE SCHEDULE

**WARNING! ELECTRIC SHOCK HAZARD. Unplug unit before cleaning or servicing.**

**WARNING:** Risk of dust and contaminants exposure. Use of respirator mask and gloves is recommended. If unit has been exposed to potentially dangerous contaminants, clean thoroughly and sanitize before reuse.

## ABOUT 3M™ HIGH AIR FLOW FILTERS

**HAF filters from 3M provide superior particle retention, resist microbial growth on filter surfaces and allow for maximum airflow throughout the filter loading cycle. Follow these guidelines to ensure maximum protection for equipment, technicians and the job site:**

**Replace the HAF filter whenever it has been vacuumed clean and reused three times.** HAF filters lose their effectiveness after three uses.

**Replace the HAF filter whenever it has been used on a mold remediation job or otherwise exposed to potentially dangerous contaminants.** Continued use of a contaminated filter risks the spread of contamination.

**Do not wash or apply any liquids to the HAF filter.** Exposure to liquids will reduce the effectiveness of the electrostatic material.

**Do not operate without the HAF filter in place. Do not operate the unit with any other filter type.** Incorrect filtration will reduce unit efficiency and can cause damage to the unit.

**NOTICE:** The unit is fitted with sensitive electronic sensors. Protect the sensors and their lead wires from damage and do not expose them to water or cleaning solution.

**Before each use**

**Inspect the electrical cord for damage.** Look for fraying, cuts, etc. Replace the cord if you find any damage.

**Inspect, vacuum or replace filter.** The unit is provided with a 3M™ HAF High Air Flow filter (part no. F372). HAF filters **may be vacuumed clean and reused up to three times before replacement.** Use a HEPA vacuum and brush tool to remove any dust or debris. Do not use compressed air or expose the filter to any liquids, as this may damage the filter.

**Monthly**

**Inspect coils.** Clean when dust accumulation is visible. In normal use, dust can accumulate and can restrict airflow, reducing performance and causing the unit to overheat. Use a vacuum cleaner with a brush tool and a

soft cloth to remove any debris. Take care not to damage any interior components.

**To maintain appearance,** wipe interior and exterior surfaces with a damp cloth. For deep cleaning and a lasting, protective shine, use an automotive interior cleaner.

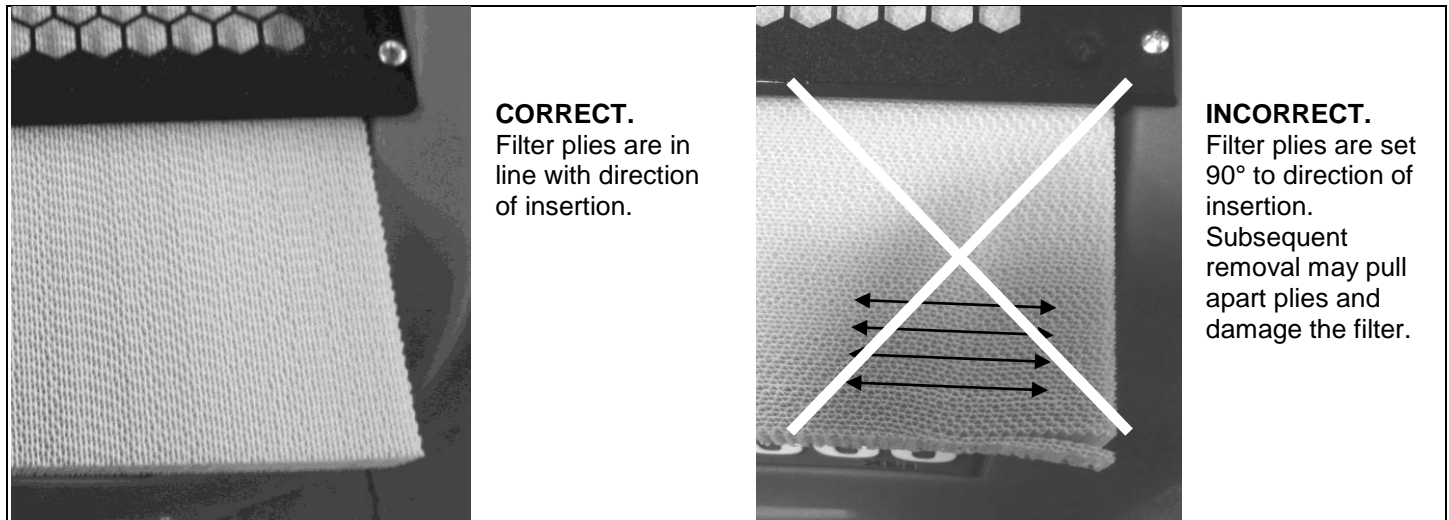
**As Needed**

**Clean pump check valve and basin.** If the unit displays the message “ER9 PUMP BLOCKED PUMP & HOSE”, the pump check valve and pump basin may need to be cleaned. Remove cover. Remove screws from pump base and lift out pump. Wipe out pump basin with a damp cloth. Unthread barbed fitting with check valve and rinse fitting and check valve with clean water. Reinstall barbed fitting into pump. Do not overtighten. Reinstall pump on base. Reinstall cover. **Clean coils.** With the cover removed, inspect both coils. If excessive dust and debris is present, vacuum thoroughly and/or clean with coil cleaner.

**For detailed maintenance instructions visit [www.legendbrandseurope.com](http://www.legendbrandseurope.com)**

**Installing the HAF filter**

To protect your HAF Filter from damage, make sure you insert the filter in the correct orientation.



**PUMP PURGE BUTTON**

The Control Panel will display the following messages when the Pump Purge Button is pressed.

CONTROL PANEL MESSAGE	EXPLANATION
--- PUMP PURGING XX	Pump is purging with countdown in seconds. Press key again to stop if needed.

## SYSTEM MESSAGES

The Control Panel will display the following messages based on system performance and environmental conditions. User action, if any is required, is indicated in the third column.

CONTROL PANEL MESSAGE	EXPLANATION	USER ACTION
INITIALIZING	Unit is powering up.	None
FIRMWARE VERSION XXX	Indicates control board firmware version number.	None
FXXX-XXX	Model number.	None
OFF	Unit has finished powering up and is operating.	None
PLEASE WAIT COMP. DELAY XX	60s delay before compressor turns on. Allows system pressure to equalize.	None
UNIT ON XXXX HRS INLET XXX°F / XX%	First line: indicates total operating hours. Second line: Toggles between inlet temperature and inlet RH every 2 seconds.	None
HUMIDISTAT INLET XXX°F / XX%	First line: indicates unit is in humidistat mode Second line: Toggles between inlet temperature and inlet RH every 2 seconds.	None
HI TEMP CYCLE REMAINING XX MIN	Unit overload limit reached. Cool-down initiated.	None
--- DEFROST XX	Unit is defrosting, with countdown in seconds.	None
WAIT FOR DEFROST XXX	Unit turned off when coil is cold or already in a defrost cycle. Proceeds to finish cycle or initiate one to clear the coils of ice before storage.	None
WAIT FOR UNIT DRYING XXX	Occurs when unit is turned off and coil is not frozen. Clears the coils of water before storage.	None



## ERROR MESSAGES

If the control system detects an error, it will produce an error (“ER”) message. If this occurs, first unplug the unit and then plug it back in. This will usually reset the electronics, and the unit will begin operating normally. If the error message reappears, refer to the explanations and solutions shown below. If these solutions do not fix the problem, contact your local authorized service center.

CONTROL PANEL MESSAGE	EXPLANATION AND SOLUTION
ER4 DEFROST SENSOR CONNECT or ER4 OUTLET SENSOR CONNECT	Temp sensor is open, missing, or shorted. Check that temp sensors are installed correctly on control panel. If error persists, contact service.
ER5 SENSOR CONNECTION ON BD	Inlet Temp/RH sensor is open, missing, or shorted. Check that inlet temp/RH sensor is installed correctly on control panel and inlet shroud. If error persists, contact service.
ER6 CONTACT SERVICE CENTER	Current sensor failure. If error persists, contact service.
ER7 INVALID MODEL SETTING	Incorrect or unsupported DIP switch settings. Contact Dri-Eaz service department for correct DIP switch settings.
ER8 BUTTON STUCK ALL BUTTONS	Key is stuck or has been held down too long. Contact service.
ER9 PUMP BLOCKED PUMP & HOSE	Check for obstructions in drain hose. Check the pump.

## TROUBLESHOOTING

FAULT	CAUSE	SOLUTION
Water drips out when moving unit	Unit was unplugged before purging was complete.	Purge unit before moving. See “At the End of the Job.”
Unit does not operate	Unit not switched on. No power to machine.	Switch unit on. Plug in unit; check power cord connection at wall outlet.
Unit operating, but room not dry	Not enough time to dry. Poor air movement in room. Excessive moist air infiltration.	Allow more time for drying. Increase air movement with air movers. Seal off area to reduce infiltration.
Unit collects too little water	Room air is dry. Room temperature is too low. Filter is clogged. Coils are clogged.	Confirm humidity level with hygrometer. Increase room temperature. Check filter. Clean or replace as necessary. Check coils. Clean as necessary.
<i>If the problem you are experiencing is not listed here, call your local distributor.</i>		

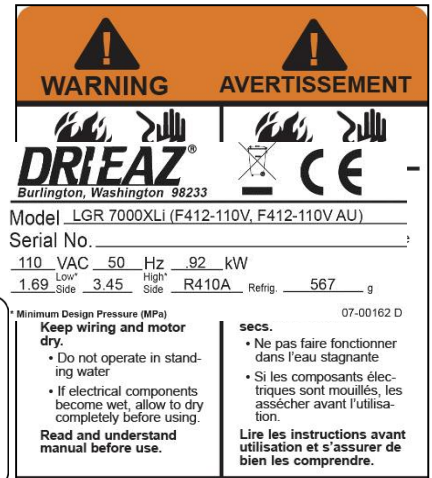
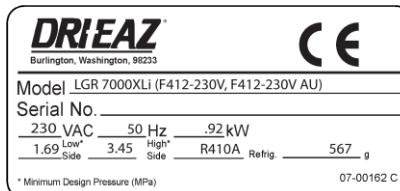
## SPECIFICATIONS

Model	LGR 7000XLi F412-230V EU	LGR 7000XLi F412-110V UK
Weight (with cord and hose)	49 kg	49 kg
Dimensions (H x D x W)	85 x 51 x 51 cm	85 x 51 x 51 cm
Amperage	4.0A	8.0A
Power	230V / 50Hz	110V / 50Hz
Water removal (30°C/80%RH)	83 l /day	83 l /day
Water removal (20°C/60%RH)	43 l / day	43 l / day
Process air (max.)	513 CMH	513 CMH
Sound level level (avg.)	Does not exceed 71 dB	Does not exceed 71 dB
Air filter	3M™ HAF filter Part no. F368 (24 pack)	3M™ HAF filter Part no. F368 (24 pack)
Drain hose	12.2 m	12.2 m
Power cord	7.6 m	7.6 m
Construction	Rotomolded shell.	Rotomolded shell.
Safety	CE	CE
Specifications are subject to change without notice. Some values may be approximate. *Fan speed varies automatically for optimized performance.		

## PARTS INCLUDED

- 12 m of drain hose with quick-connect fitting.
- 7.6 m detachable power cord.
- 3M™ HAF High Air Flow filter. Reorder no. F372 (24 pack)

For proper disposal, this unit should be taken to a recycler licensed to process refrigeration equipment.



# ELECTRICAL SCHEMATIC

