

Low Grain Refrigerant Dehumidifier Owner's Manual

**Model
XD-165L**

(220-240V~ 50Hz)

Read and save these instructions



Read and save these instructions
www.xpower.com | www.tx-5.com.hk

Index: AU-1-A3
Edition: 1.1.Final

Safety Instructions

WARNING - READ AND SAVE THESE INSTRUCTIONS BEFORE USING THIS PRODUCT.

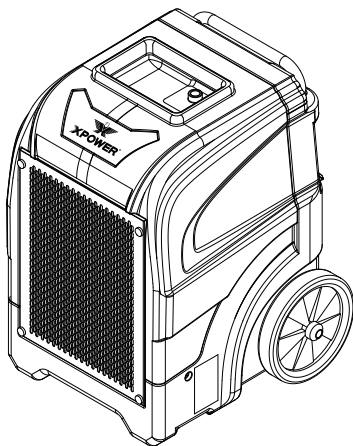
The user of electrical products may create hazards that include, but are not limited to injury, fire, or electrical shock. Failure to follow these instructions may damage and/or impair its operation and void the warranty.

- Before operating, remove all packaging material and check for any damage that may have occurred during shipping or any missing items.
- Check household power supply to ensure it matches the appliance's specification.
- **DO NOT** operate the appliance with a damaged cord or plug. Discard or return to an authorized service facility for examination and/or repair.
- Use only with GFCI protected receptacles. Contact a qualified electrician for verification or installation of a GFCI receptacle if necessary.
- **DO NOT** run cord under carpeting. **DO NOT** cover cord with throw rugs, runners, or similar coverings. **DO NOT** route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.
- To reduce the risk of fire or electric shock, **DO NOT** use this appliance with any solid state speed control device.
- **DO NOT** touch this appliance or the plug with wet hands or while standing in water.
- **DO NOT** operate the appliance near any pooled water.
- **DO NOT** use the product in areas where gasoline, paint or other flammable goods and objects are used or stored.
- **DO NOT** insert or allow objects to enter any ventilation or exhaust opening as this may damage the appliance and void the warranty.
- **DO NOT** cover the air inlet or outlet on the appliance.
- **DO NOT** direct the air flow at human faces or bodies.
- **DO NOT** allow children to play with this appliance.
- **AUTOMATICALLY OPERATED DEVICE** – To reduce the risk of injury, disconnect from power supply before servicing.
- Remove the power cord from the electrical receptacle by grasping and pulling on the power cord plug-end only, **DO NOT** pull the cord directly.
- **DO NOT** attempt to repair or adjust any electrical or mechanical functions of this appliance, as this may cause danger and void the warranty.
- If the appliance is damaged or it malfunctions, **DO NOT** continue to use it. Unplug the product from the electrical outlet. Refer to troubleshooting guide or contact XPOWER.
- Store in a dry area, away from exposure to sunlight, extreme temperature and humidity, or other extreme environment, when not in use.
- **DO NOT** stack this appliance to more than three units.
- Always grip the retractable handle and keep the unit up when transporting from room to room. **DO NOT** tilt the product on its side or upside down.
- If the dehumidifier was transported tilted on its side or upside down, you must position it upright and wait at least 4 hours before using it again.
- An electronic instruction manual can be obtained through manufacturer's website www.xpower.com.

LGR Dehumidifier Introduction

- XPOWER LGR (Low Grain Refrigerant) Commercial Dehumidifiers are designed to maximize water extraction while combining the highest efficiency in performance and portability.
- Latest technology and a high efficiency extraction process ensures peak performance in even the most challenging environments, such as extreme temperatures and low humidity environments.
- With a high and efficient water removal capacity, the LGR (Low Grain Refrigerant) Dehumidifier allows an extreme dry zone in the working area and water migration to the air from all surfaces. It is ideal for water damage restoration and industrial applications where maximum air drying performance is needed.

Items Included



Dehumidifier x 1



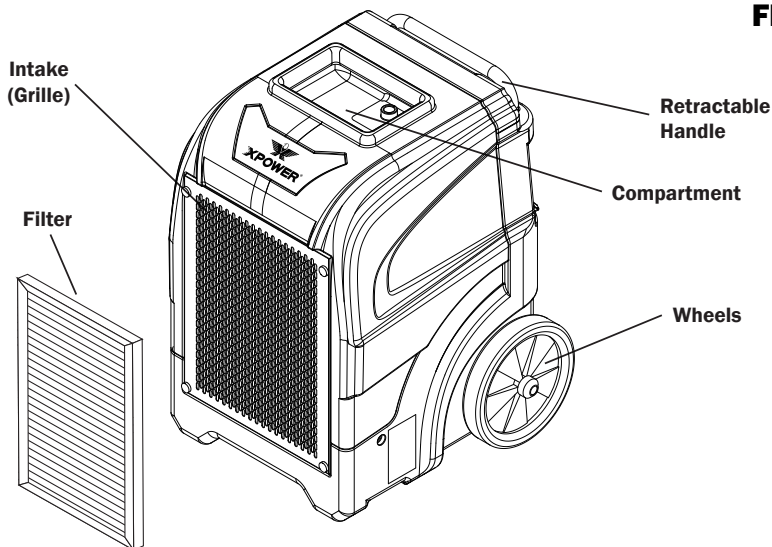
Drain Hose x 1



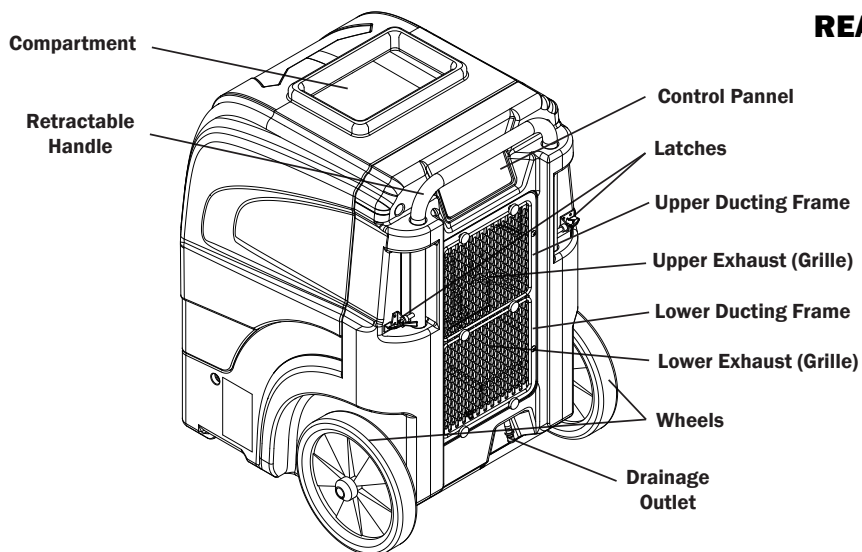
Owner's Manual x 1

Parts Description

FRONT



REAR

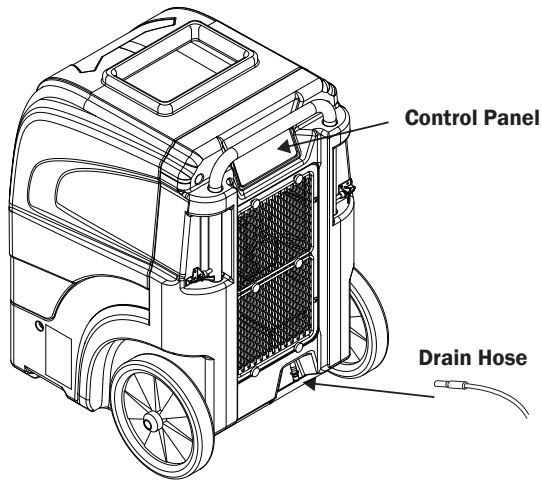


Installation and Operation Guide

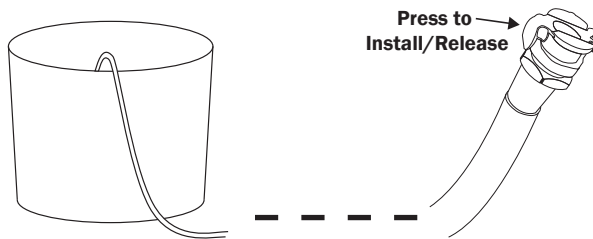
Selecting a Location (Important)

- **Positioning:** Before using the dehumidifier, place the unit **UPRIGHT** for at least 1 hour before use to allow the refrigerant to stabilize. If the unit was tilted on its side or upside-down during transportation, set the unit **UPRIGHT** for at least 4 hours before use. The dehumidifier must be positioned **UPRIGHT** on a level surface during use.
- **Enclosed Area:** For optimal efficiency, the dehumidifier must be operated in an enclosed area. Keep all doors, windows and other outside entrances to the room closed. Turn off the air conditioning.
- **Air Circulation:** It's suggested to have a constant efficient air circulation inside the area that you are going to work in, for example, setting up a circulation with XPOWER Air Mover combinations.
- **Environmental Temperature/Humidity:** The dehumidifier is designed to work in an environment with a temperature of 0.6°C to 40.6°C and relative humidity level of 20.0% or higher. The dehumidifier may not function normally or efficiently if the room temperature and humidity level exceed this temperature and humidity level range.
- **Power Cord and Drain Hose:** The power cord has a length of 3.0 meters and the drain hose has a length of 12.0 meters. Select a location where the power cord can reach the power source and the drain hose can reach the area you want. Please do not lift the drainage hose higher than 5.0 meters above the machine.
- **Inlet and Outlet Orientation:** Also pay attention to the orientation of the air inlet and air outlet. Make sure the airflow won't influence any object near the dehumidifier.
- **IMPORTANT:** The effectiveness of the dehumidifier can be influenced by different factors. You should keep any new moisture-laden air away from the working area and allow sufficient enclosed air circulation in the room. You may also find that installing multiple dehumidifiers may be required for larger enclosed areas.

Drain Hose Installation

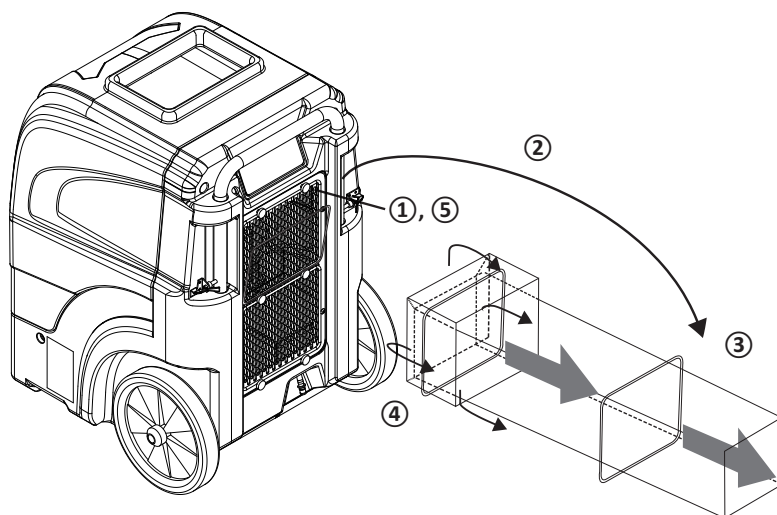


- Attach the drain hose inlet to the drain outlet of the machine.
- The machine's outlet can be found as the graph on the left.



- Please have a separate container to collect the water coming from the other end of the drain hose.

Extension Setup (Optional)

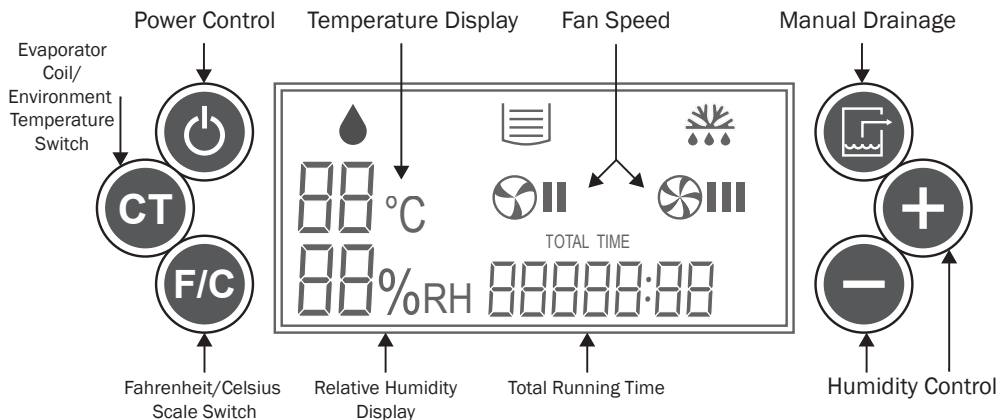


Exhaust Ducting (Lay Flat) (30.5 cm Diameter)

- ① Unscrew the two screws.
- ② Take out the ducting frame.
- ③ Let the ducting hose go through the ducting frame.
- ④ Turn the ducting hose around the frame to its back.
- ⑤ Reinstall the ducting frame and screw on the two screws.

Repeat and setup the ducting on the other ducting frame.

Control Panel



Buttons

Power Control

Press to switch the dehumidifier ON or OFF.

Fahrenheit/Celsius Scale Switch

Press to switch the display of the temperature in Fahrenheit or Celsius scale.

Evaporator Coil/Environmental Temperature Switch

Press to switch the display of the temperature of the evaporator coil or environment.

Manual Drainage

Press to drain manually. Manual drain will last for 45 seconds. [See Page 11: Drainage (Important)]

Humidity Control

Tap "+"/ "-" to increase/decrease the desired humidity level by 1% increments. Touch and hold to increase/decrease the setting humidity level by 5% per second. The adjustable range is 30% to 90%.

Information



Relative Humidity Display

This will show the relative humidity level of the setting or environment. By default, it displays the actual environmental humidity. When adjusting humidity, it will display the setting humidity and blink. After 5 seconds from the last adjustment, it will display the environmental humidity again. (See Page 8: Humidity Control)

Temperature Display

This will show the temperature of the evaporator or environment (See Page 8: *Evaporator Coil/Environmental Temperature Switch*). When in Celsius °C scale, will be illuminated. When in Fahrenheit scale, will turn off. If the temperature shown is higher than 99°F, the scale will be set to Celsius automatically (See Page 8: *Fahrenheit/Celsius Scale Switch*).

Fan Speed

This will show if the machine is running on low () or high () fan speed. The dehumidifier will control the fan speed according to the environmental temperature and humidity.

Total Running Time


This will show the total running time from the first usage to the current moment. Running time starts to count during the time when the machine turns on. The value can't be reset.

Indicators

Defrosting Light

This light indicates the evaporator coil or environmental temperature is too low. Frost may start to appear on the evaporator coil. The machine is now defrosting.

Constant Dehumidification

At the humidity level setting of 30%, if humidity control button “-” is pressed,  will blink on the humidity display. The machine will enter into constant dehumidification mode and won't stop dehumidification as environmental humidity changes.

Error Codes E1, E2, E3, E4, E5, E6

These are error codes. Please refer to Troubleshooting Guide for more information.

Dehumidification Light

When this light blinks, it indicates the machine is now preparing for dehumidification. When this light stays bright, it indicates the machine is now dehumidifying.


Drainage Indicator Light

When this light blinks, it indicates the machine is in drainage process. When this light stays bright, it indicates the water tank is full.

Turn on the dehumidifier

Press the Power Control button to switch on the machine. You may see the dehumidification light is flashing. Please wait for 3 minutes (180 seconds) until the machine completes the startup.

Write down the starting time

Please remember to write down the starting time  right after the machine starts, if you want to calculate the usage time.

Set the desired humidity level

- Tap the humidity control button to adjust the setting humidity level. The default humidity setting is 30%. The adjustable range is from 30% to 90% (See Page 8: *Humidity Control*). The machine will try to match the set humidity level and maintain it.
- If you want the machine to work constantly, please adjust the humidity level down to 30%, and then press “-” (See Page 9: *Constant Dehumidification*). Tap “+” to exit constant dehumidification mode.
- If the dehumidifier loses power accidentally, when turned on again, the dehumidifier will work on the last known configuration.

Dehumidification

- When the machine is dehumidifying, the dehumidification light goes on.
- You may see the dehumidification light is flashing. That means the dehumidification temporally pauses or the environmental humidity has reached the setting level. Please wait until the machine completes the startup or until the humidity level rises up again.
- The dehumidifier will control the fan speed according to the environmental temperature and humidity.

Defrosting

- When the evaporator coil or the environmental temperature is too low, frost may appear on the evaporator. This will lower the effectiveness of the dehumidification. The machine will start defrosting until the temperature goes back to normal.
- When the machine is defrosting, the dehumidification pauses. The dehumidification light goes off, and the defrosting light will go on.
- Do not turn off the machine during defrosting process.

Drainage (Important)


- Press the Manual Drainage button to manually drain the unit. It will last for 45 seconds and won't stop dehumidification or defrosting process.
- If the water tank is full or not positioned horizontally, the water tank full indicator light will go on. Any dehumidification or defrosting process will pause and the machine will automatically process drainage for 45 seconds. Afterwards, if the water tank is still

detected to be full, an error code will be displayed (See Page 9: Error Codes or Page 14: Troubleshooting Guide).

Start Your Job (Continued)

- When turned off, the machine will automatically process drainage for 60 seconds. Please wait until this process completes.
- Please do not lift the drainage hose higher than 5.0 m above the machine.

Calculate the usage time

- Please remember to write down the ending time  right before the machine shuts down.
- Compare the starting time and the ending time to calculate the usage time.

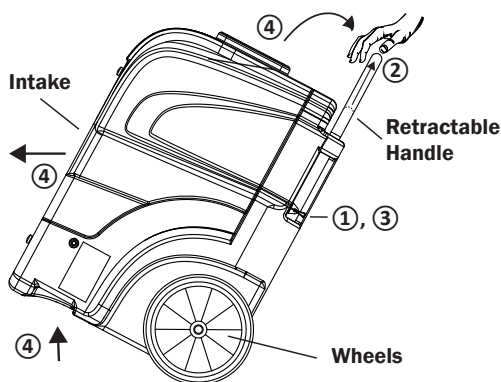
Turn off the dehumidifier

Press the Power Control button to switch off the machine. When turned off, the machine will automatically process drainage for 60 seconds. Please wait until this process completes.

Transportation

Before transportation, you should always:

- Press the Manual Drainage Button to manually drain the unit. Otherwise the water may spill and enter into core parts of the machine during transportation. This may also void the warranty.
- Disconnect the machine from the power source.
- Remove all the extension setup (Refer to Page 7: Extension Setup) and uninstall the power cord and drain hose.



Transport with Retractable Handle

- ① Release the latch.
- ② Pull up the Retractable Handle.
- ③ Reset the latch.
- ④ Lift the dehumidifier on the wheels and push to transport with the Telescoping Handle.

User Maintenance Instructions

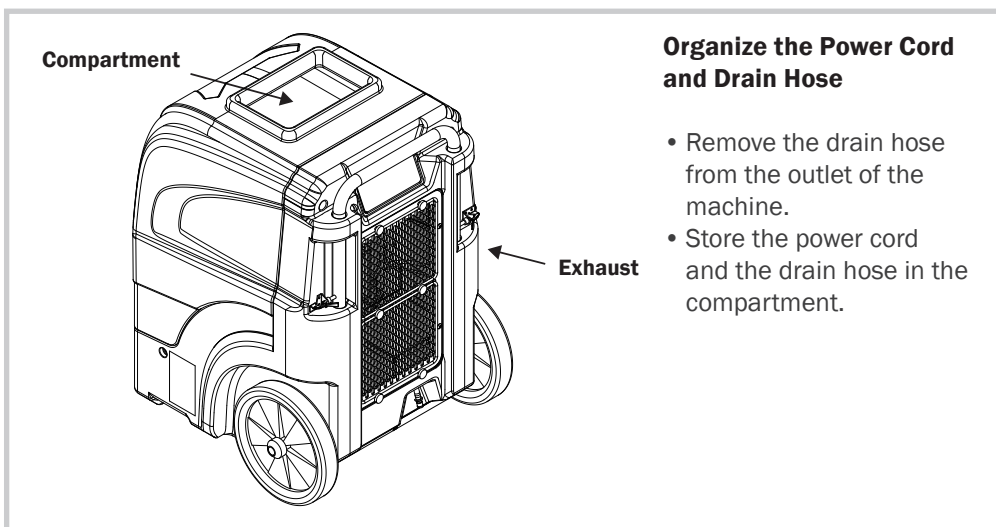
Frequent maintenance is recommended on this appliance. Failure to follow the maintenance instructions may cause failure of the appliance and void the warranty.

Before maintenance or storage, you should always:

- Process a drainage manually.
- Disconnect the machine from the power source.
- Remove all the extension setup.

Clean the surface

- Use a damp cloth to wipe the surface of the housing. Do not clean the unit with water directly.
- Do not clean the fins of the evaporator and condenser by yourself.



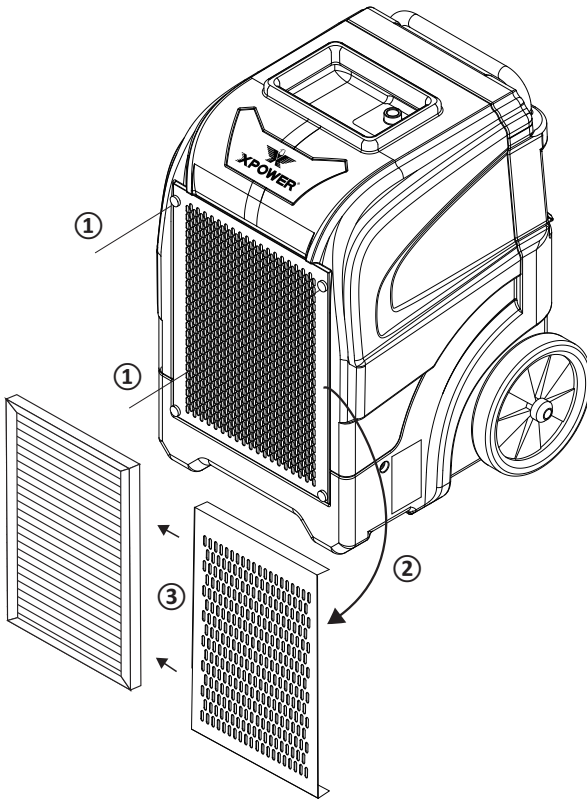
Organize the Power Cord and Drain Hose

- Remove the drain hose from the outlet of the machine.
- Store the power cord and the drain hose in the compartment.

Store the machine

- Store the appliance in a dry and cool indoor place, away from direct sunlight as well as chemicals and out of reach of children.
- **IMPORTANT:** make sure the machine is positioned on a level surface.
- If you want to stack this appliance, stack them on their tops with the same orientation.
- Do not stack more than three units of this appliance.

Store or Replace the Filters



- ① Unscrew the two screws.
- ② Take out filter grille.
- ③ Slide off the filter from the grille.

- Clean and wash the filters with water.
- Store the filter in dry and cool area in a sealed container.
- Replace filters if necessary.

Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	SOLUTION
Dehumidifier does not start	No electricity.	Check for power supply.
	The power cord is not properly plugged in.	Remove and reconnect the power cord.
Dehumidifier runs but humidity level does not decrease	The dehumidification system is within startup process.	Wait for 3 minutes (180 seconds) until the dehumidification light stops blinking.
	The humidity level setting is too high.	Decrease the humidity level setting.
	The working area is not enclosed.	Make sure the area is tightly sealed.
	There are other sources of humidity in the room.	Remove these sources or wait until they completely volatilize.
	The humidity level has reached the setting level.	Decrease the humidity level setting, set to constant dehumidification mode, wait until the humidity level rises up again.
Dehumidifier runs but humidity level does not decrease	The machine was tilted and wasn't positioned upright for enough time before use.	Position the machine upright on a level surface and wait for at least 4 hours before next use.
	The air filter or air inlet/outlet is blocked.	Remove blockage.
	The environmental temperature is too low/high or the humidity level is too low.	The dehumidifier is designed to work in an environment with a temperature of 0.6 °C to 40.6 °C and relative humidity level of 20% and higher. Make sure the room temperature/humidity does not exceed this range.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Water on the floor	The drain hose is loose.	Tighten the connection of the drain hose.
Sudden noise	The machine starts drainage process.	The water pump can create sounds during operation. This is a normal sound.
Error Code: E1 or E6	Motor is blocked or not able to function.	Remove blockage or contact XPOWER for more assistance.
Error Code: E2	Failure of the temperature sensor.	The dehumidification can function but you won't be able to see the temperature/humidity on the screen. Contact XPOWER for more assistance.
Error Code: E3	Failure of the humidity sensor.	
Error Code: E4	Failure of the water pump	Contact XPOWER for more assistance.
	The machine is not in a level position.	Position the machine on a level surface.
	The drain hose is blocked.	Remove blockage.
Error Code: E5	Failure of the defrost sensor.	The dehumidification can function but will defrost for 5 minutes every half an hour. Contact XPOWER for more assistance.

If troubleshooting does not resolve your problem, please contact XPOWER or other parties authorized by XPOWER for further instructions.

Technical Specification

MODEL NUMBER	XD-165L
Voltage / Frequency	220-240 V~, 50 Hz
Amperage	5.9 A (26.7 °C / 60% RH)
Operation Temperature/ Relative Humidity Requirement	0.6 °C to 40.6 °C / 20% RH or higher
Rated Airflow	430 CFM
Speed Control	Automatic
Water Removal Efficiency 40.6 °C / 20% RH	9 L / day
Water Removal Efficiency 26.7 °C / 60% RH	78 L / day
Water Removal Efficiency 32.2 °C / 90% RH	132 L / day
Compartment Feature	Yes
Time Meter	Up to 9,999 hours 50 minutes
Filter Type	Stainless Steel Filter
Cord Length	7.6 m
Drain Hose Length	12.0 m
Unit Dimension (L) x (W) x (H)	56.0 x 57.0 x 75.6 cm
Unit Weight	55.0 kg
Safety Certification	SAA / RCM

If your product(s) is not listed above, please visit www.xpower.com for more information.

Conditions of Warranty (Cleanstar™)

Cleanstar Pty Ltd

ABN: 51 121 002 104 | ACN: 121 002 104

59 Radford Road,
Reservoir, Victoria, 3073, Australia

Phone: **(03)-9460-5655** | International: **+61-3-9460-5655**

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www.cleanstar.com.au | sales@cleanstar.com.au

Thank you for purchasing your new **Cleanstar/XPOWER** product. We are confident this product will give you trouble-free use and excellent service, provided the operator uses and maintains the product in accordance with this Owner's Manual. Please read the Owner's Manual carefully before using the product for correct operation and maintenance procedures, and store it in a safe place for future reference.

This document outlines the terms and conditions of warranty for your **Cleanstar/XPOWER** product. This is an important document that should be kept with your proof of purchase documents in a safe place for future reference should you require service for your product.

- (1) This is a parts and labor warranty against faulty or defective parts, materials or workmanship in manufacturing, when the product is used and operated in accordance with the Owner's Manual.
- (2) This product carries a **12 month (1 year) warranty period** that commences from the original date of purchase by the first user/purchaser, and is not transferable.
- (3) This warranty only applies to products purchased and used in Australia and New Zealand.
- (4) At all times during the warranty period, **Cleanstar** shall, at its sole discretion, determine whether repair, replacement or refund will apply if the product has a valid warranty claim applicable to it.
- (5) The repair or replacement of the product under this warranty **does not** extend the original period of warranty.
- (6) This warranty **does not** cover service calls, traveling time or consumable parts such as belts, dust bags, filters, hose or hose parts, rods and wands, floor tools and accessories, motor brushes and other like consumable items, unless defective in manufacture. In order to prolong the life of accessories and consumables, regular care and maintenance is recommended.

Conditions of Warranty (Cleanstar™)

- (1) Please retain your original proof of purchase which will be required before you can make a claim under this warranty. If proof of purchase can not be provided at the time of a warranty claim or service, any work carried out on the cleaner is chargeable.
- (2) Any transportation and delivery costs involved in the repair of defective parts shall be borne by the claimant. In all instances, unless the product is transported by **Cleanstar** or a **Cleanstar** authorized representative, the product is transported at the owner's cost and risk while in transit to and from **Cleanstar** or its **ASA**.

Please note that this warranty will be voided in the following cases (which are not exhaustive) and the warranty does not apply to the cost of replacing any parts of the product resulting from:

- Accidental damage;
- Normal wear and tear;
- Neglect, misuse or physical abuse by the operator, including failure to properly maintain or service;
- Any alterations, modifications or tampering with the product without the prior written consent of Cleanstar;
- Incomplete or improper installation;
- Incorrect, improper or inappropriate operation;
- Insect or vermin infestation;
- Power surges, electrical storm damage or incorrect power supply/voltage;
- Excessive use or use for which this product has not been designed;
- Vacuuming up toner, powders, glass, hazardous, flammable or corrosive materials, plaster dust, concrete dust and other similar building or construction materials;
- Failure to comply with the operating instructions contained in the Manual supplied with the product;
- If the product is rented;
- If the product is used **outside of Australia or New Zealand**;
- If the product was serviced or repaired by anyone other than Cleanstar, or one of **Cleanstar's Authorized Service Agents (ASA)**. **Cleanstar** is unable to accept any responsibility under this warranty for any repair work not carried out by an **ASA** or from the use of non-genuine parts.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and

Conditions of Warranty (CleanstarTM)

the failure does not amount to a major failure. The benefits conferred by this warranty are in addition to other rights and remedies under law in respect of the product to which this warranty relates.



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