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# PUREAIRO

## WMDH 33 (IN-WALL SOLUTION)

### Installation & Operations Manual

#### Key features:

- The unit is noise-free
- Its air filter is cleanable
- Can be plugged directly into an outlet of 220V or hardwired into an existing supply
- Engineered to drain into a plumbing line or a hub-drain
- Features an internal digital dehumidistat



# PRODUCT INTRODUCE

The energy efficient WMDH 33 IN Wall Dehumidifier or ON Wall Dehumidifier system removes excess moisture to reduce the risks associated with mold growth. Specifically designed for lowering relative humidity in multi-family housing, the WMDH 33 has proved beneficial in a range of indoor living spaces. A successful humidity control strategy will lower relative humidity levels below 60% to proactively prevent mold growth. The most effective and efficient way to improve Indoor Air Quality (IAQ) and prevent mold growth is with supplemental dehumidification.

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## SAFETY NOTES

- The WMDH 33 Dehumidifier must always be connected using a grounded electrical connection as required for all electrical appliances. The warranty is voided and all responsibility for the operation is born by the owner if non-grounded wiring is utilized.
- The WMDH 33 Dehumidifier must only be installed, maintained and serviced by a qualified technician.
- Follow all state and local plumbing and electric codes.
- The WMDH 33 Dehumidifier is intended only for operation when the unit is wall mounted or in wall and level. Any other orientation could cause water to contact electrical components.
- If any water may have spread throughout the unit, the unit should be opened and allowed to dry thoroughly before reconnecting to electric and restarting.
- For proper operation, no obstruction should be located within 914mm of the discharge of the unit
- Do not insert any objects or fingers into the inlet or discharge. If service is required, call a qualified technician. All work on unit should be done with the unit "off" and unplugged or the breaker turned "off."
- Do not use water to clean the unit exterior. Only use a damp cloth to clean the exterior and always unplug or disconnect the power of unit first.
- The drain hose must be installed to ensure the proper flow of condensate water to a drain source.

## ELECTRICAL SUPPLY

<b>POWER SUPPLY</b>	220 V, 50 Hz AC, Single Phase
<b>OUTLET REQUIREMENT</b>	3-Prong
<b>CIRCUIT PROTECTOR</b>	15 Amp Time Delay Fuse or Circuit Breaker

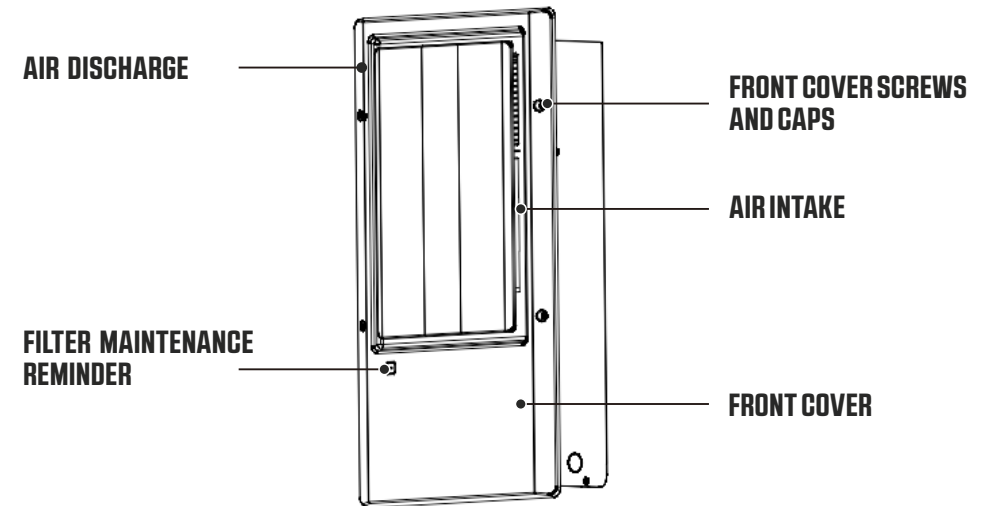
**WARNING** 220 Volts AC may cause serious injury from electric shock.

### TO ENSURE SAFETY:

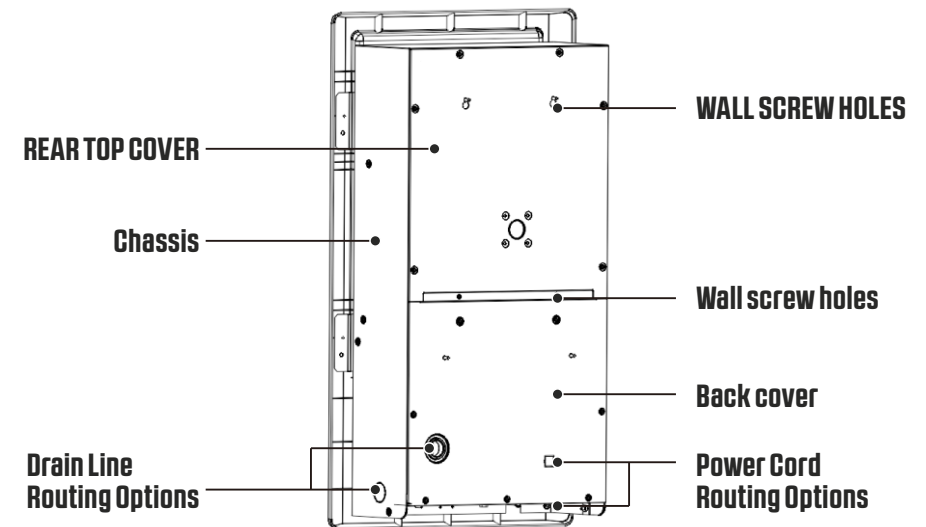
- 1 Disconnect electrical power before servicing.
- 2 Only plug unit into grounded electrical circuit.
- 3 Do not use extension cord.
- 4 Do not use a plug adapter.

## DEHUMIDIFIER DIAGRAM

### FRONT VIEW



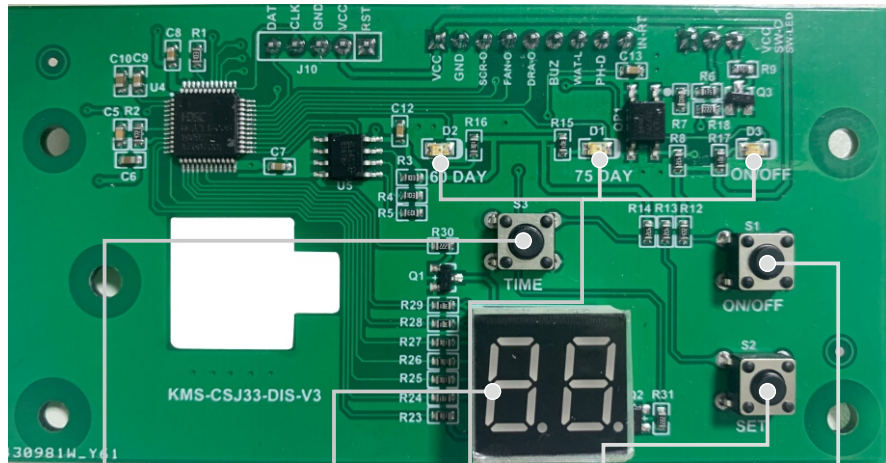
### BACK VIEW



# PRINCIPLE OF OPERATION

The WMDH 33 Dehumidifier utilizes its integral humidistat to monitor the conditioned space. When the relative humidity goes above the selected set point, the dehumidifier will energize. Air is drawn across an evaporator coil, which is cooler than the dew point of air. This means moisture will condense out of the air. The air is then reheated through the condenser coil and distributed back into the room.

## CONTROL BOARD



Filter replacement time switches 60 or 75 days      Humidity Display      LED      Humidity Setpoint Button      On/Off Button

## OPERATING INSTRUCTIONS

### 1 ON/OFF Control

Plug the unit in and the display will show the current room relative humidity. Press the on/off button, and the machine will beep twice indicating it is ready for automatic service. If the humidity is below setpoint, it will remain in standby condition. The on/off led will flash indicating the unit is in standby mode. If the humidity is above setpoint, the unit will turn on and begin to remove moisture from the room. The on/off led will be in constant on mode while the dehumidifier is on mode.

Press the on/off button again, and a single beep will indicate that the unit is turning off. No room conditioning will occur until the unit is turned on again. The on/off LED will be turn off.

### 2 Setting the Humidity Level

Press the button to set indoor humidity. The humidity display will shift from displaying the actual room humidity level to the current setpoint. The humidity can be in 1% increments from 36-90%. Pressing the SET button increases the setpoint by 1% unit you reach 90%, then rolls over to "CO" and increases from there.

### 3 Time

Used to adjust the filter replacement time (selection of 60 days or 75 days).

## MAINTENANCE

### WARNING

240 Volts AC may cause serious injury from electric shock. Be sure the unit is powered off and unplugged or circuit breaker is turned off before removing front cover to service unit.

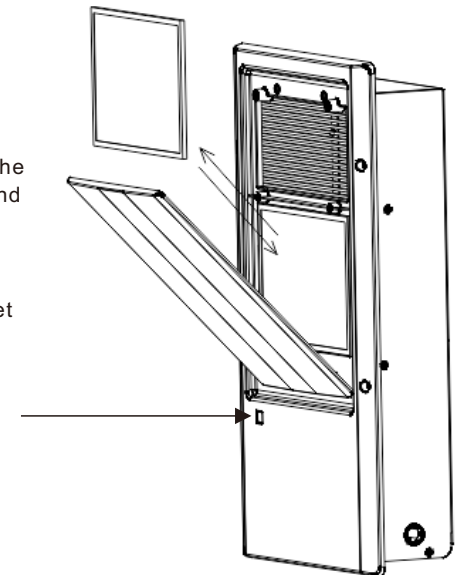
### 1 Cleaning Front Cover

Use a soft damp cloth to clean the front cover as required. Do not use any soap or solvents.

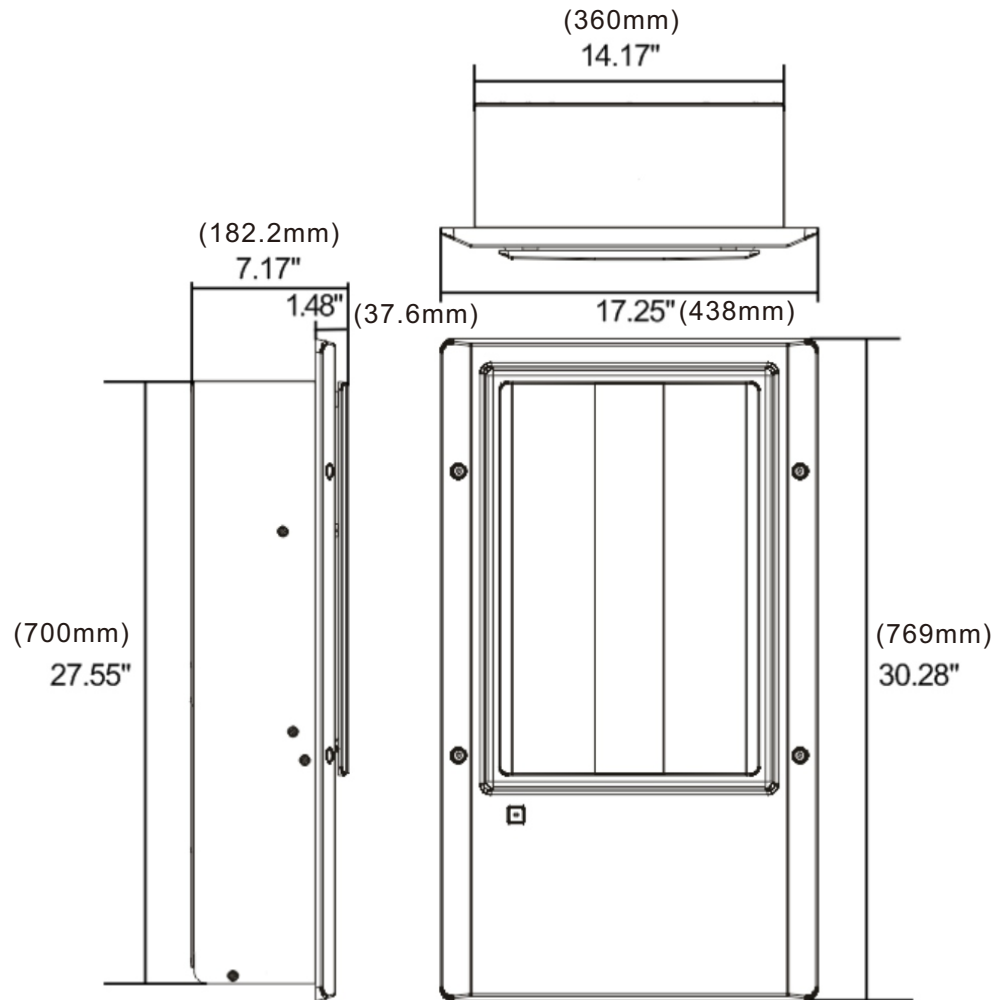
### 2 Filter Maintenance

A. When the filter maintenance red light on the front panel lights up, open the front panel and wash or replace filter as necessary.

B. After the filter replacement is completed, press the filter reminder reset button to reset the filter replacement time.



## DIMENSION DIAGRAM

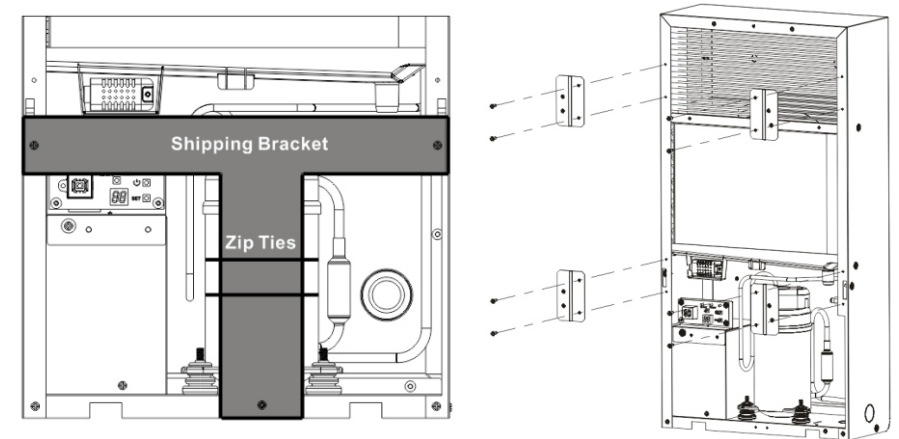


## DEHUMIDIFIER INSTALLATION

### WARNING

Dehumidifier not designed for corrosive environment

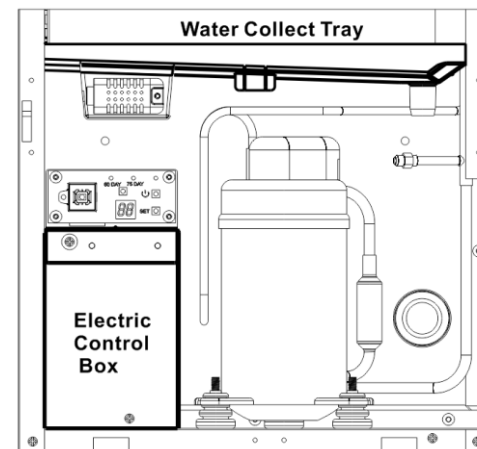
**Step 1.** Cutting the two zip ties, remove the three screws from the shipping bracket, then remove the shipping bracket.



**\*Fastening of mounting tabs and installation**

### CAUTION

Location of Electric Control Box, Water Collect Tray

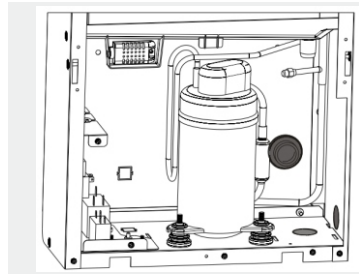
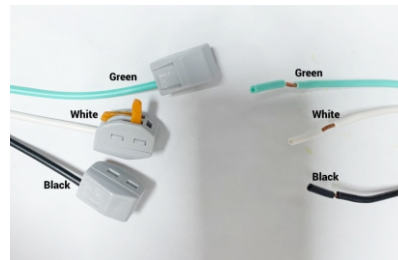
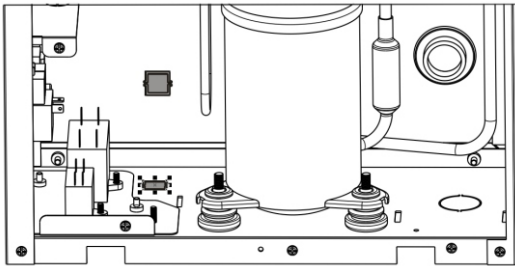




**Step 2.** There are two reserved power cord holes, one on the back and one on the bottom of the unit. Remove appropriate knock out as needed. Complete electrical connections:

- White to White (L)
- Green to Green (GRN)
- Black to Black (N)

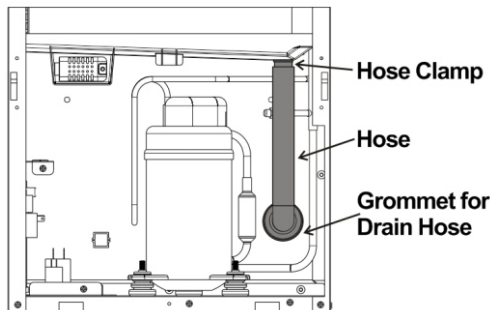
After complete electrical connections, slide electrical connection inside unit, fasten the strain relief to the power cord and then snap it on the selected power cord holes.



**Step 3.** The drain hose can exit through the back, side, or bottom of the unit. Once the location is determined, remove the appropriate knock out or plug.

#### Pipe Connection (No Pump):

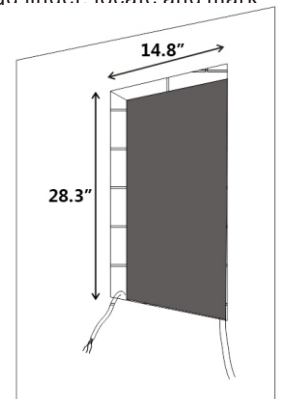
**Step 4.** Route the grommet over the drain hose and snap into place at the selected drain location. Use hex nut screwdriver to apply hose clamp to the drain hose.



**Step 5.** After installation location has been determined, use a stud finder locate and mark stud walls.

**Step 6.** Using measuring square, level and pencil, measure 375.9mm across and down 711mm and draw a line.

**Step 7.** Using a square or ruler, score the lines and cut with a drywall saw. Depending on the installation, both walls may need to be cut through.



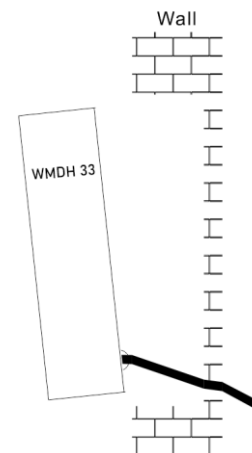
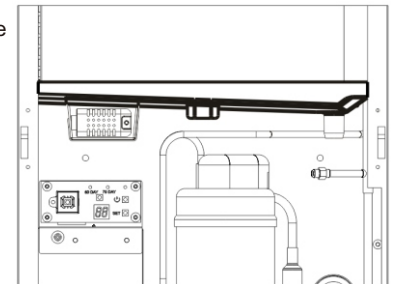
#### WARNING

SHUT OFF BREAKER / POWER  
BEFORE BEGINNING INSTALLATION.

**Step 8.** If not using included power cord, route the electrical wire from the circuit breaker or disconnect switch through the wall cavity and extend out of the opening by 356mm to 508mm.

Use the 254mm drain hose provided or the appropriate length of hose to come through the wall cavity or back of the unit and extend out of the opening by 356mm. If cutting through both walls, electrical wiring and drain hose may be routed differently. Use appropriate routing for your installation.

It is recommended to have two people to lift the unit. Place one hand under the Water Collect Tray to support the unit during this step.

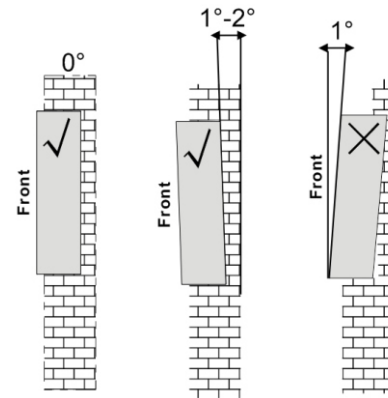


**Step 9.** Lift the unit and place it near the wall opening to route electrical wires and drain hose through appropriate knockouts. If access cover was not removed, insert the grommet into knock out hole and snap into place before routing drain hose through.

**Step 10.** Once electrical and drain hose are routed through the unit, set the unit into the wall.

**WARNING** THE UNIT IS NOT SECURED YET

Before securing the unit into place, make sure it is level. Level or slightly forward is acceptable, but never backward.



**Step 11.** Insert the dehumidifier into the center of the opening, allowing for a minimum of 1/8" (3mm) clearance from framing on both sides. Top and bottom blocking is not necessary for securing the dehumidifier. Any existing blocking, headers or framing should not intrude into the rough opening and be a minimum of 1/2" (13mm) away from the cabinet.

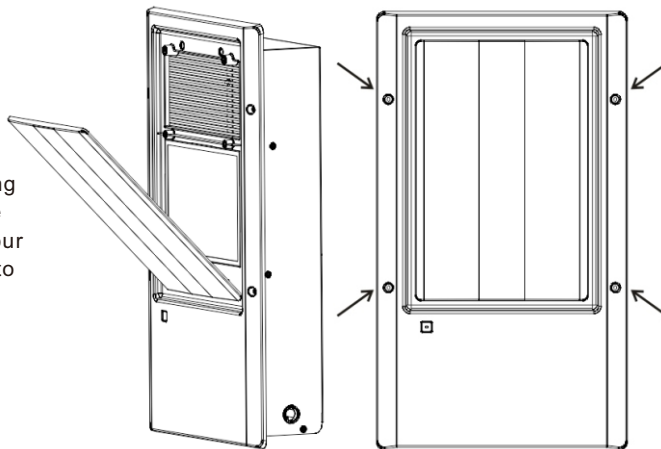
The cabinet is designed to create 1/2" (13mm) clearance to the back wall when installing inside a standard 2x6 stud space with 1/2" (13mm) minimum drywall sheathing.

For alternate installations, maintain 1/2" (13mm) clearance to back of the wall of the dehumidifier cabinet.

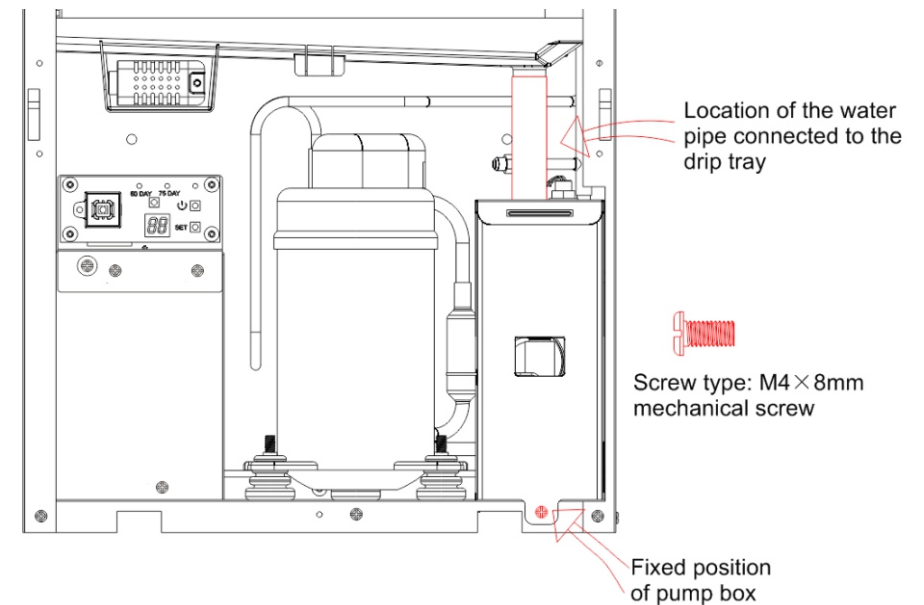
**Step 12.** Turn breaker/power back on.

**Step 13.** Set the digital controller to desired RH. See Controls Section.

**Step 14.** Install diffuser cover by aligning the lower tabs first, then setting the cover back against the wall. Insert the included four tamper-resistant screws to secure the diffuser cover.

**Optional Condensate Pump Installation:****WARNING** SHUT OFF BREAKER / POWER BEFORE BEGINNING INSTALLATION.

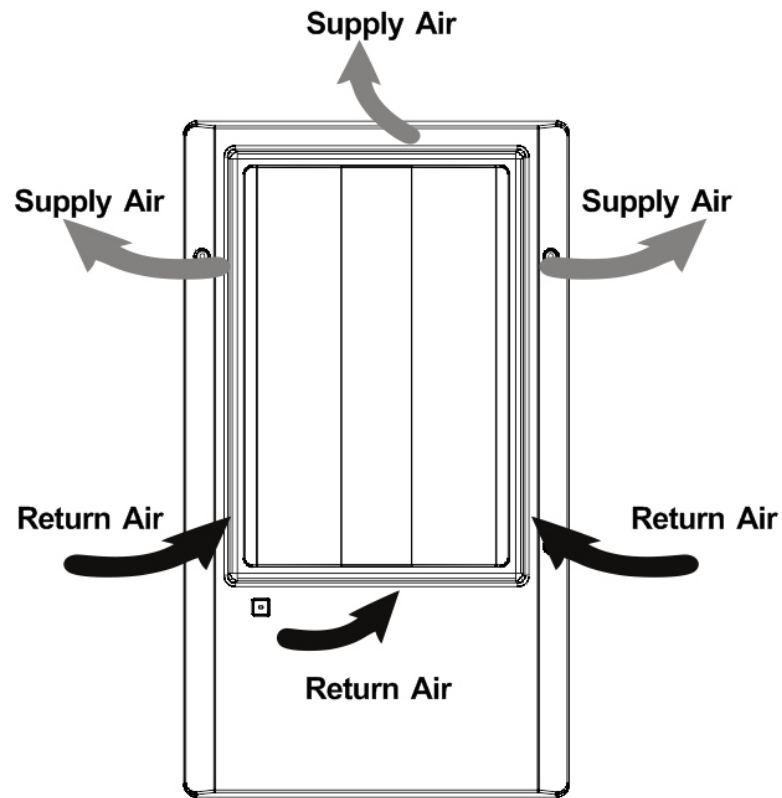
- 1 Remove the shipping bracket and put in the pump assembly;
- 2 Connect the water pipe of the water pump box to the water tray, and fix the water pump component to the chassis through a screw;
- 3 Connect the water pump power cord and water level sensing line on the water pump assembly to the water pump power cord and water level sensing line inserted on the main control board, and connect the drainpipe at the rear of the water pump.



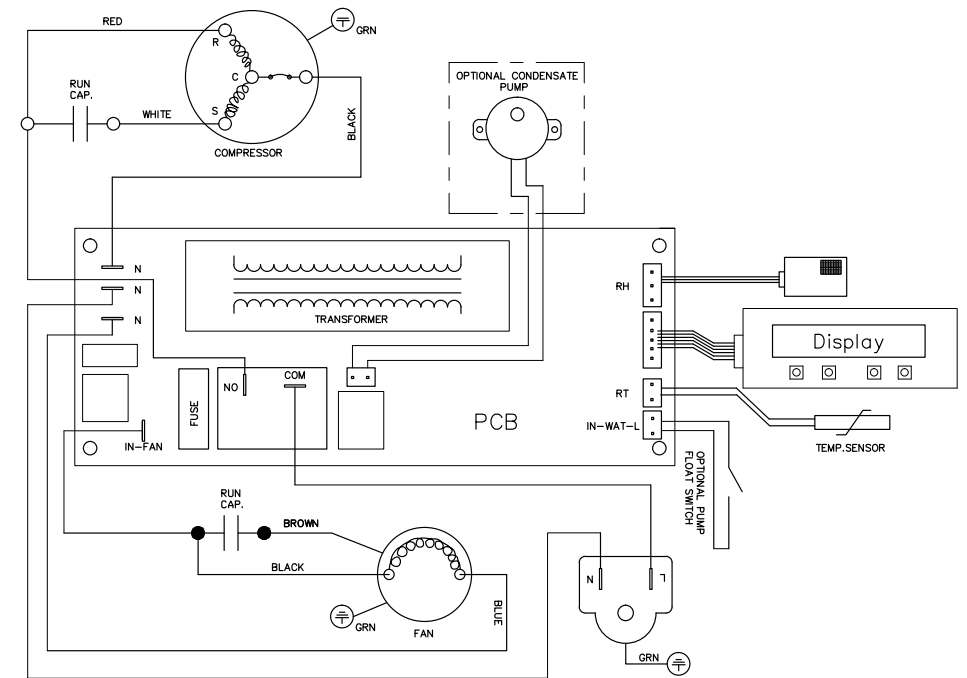
## AIR FLOW

The WMDH 33 functions by drawing moist air in through the bottom portion of the diffuser and returning dried air to space out the top portion of the diffuser.

**Note:** Avoid blocking the return and supply airflow to maximize unit performance and prevent heat build-up.



## WIRING SCHEMATIC





# TROUBLESHOOTING

SYMPTOM	CAUSE	SOLUTION
<b>Machine Doesn't Run</b>	Power Supply	Verify that there is power to the outlet and that the plug is properly installed in outlet.
	Room Temperature Over 35°C or Below 10°C	The unit is outside the operating temperature range. Modify the room conditions so the temperature is between 10-35°C and operation will commence.
<b>Cannot Start Dehumidifier</b>	Air Filter is Clogged	Clean the filter or replace according to instructions listed in manual
	Air Inlet or Outlet is Jammed	Clear the blockage from inlet or outlet.
<b>Loud Noise</b>	Machine Is Not Level	Reposition unit so it is level
	Filter Jammed	Replace the filter
	Unit not installed with 4 screws or poor quality screws	Unit MUST be installed with 4 screws provided.
	Machine not supported by blocking	Blocking is required
	Machine is touching or rubbing an unrelated item	isolate items to eliminate noise/vibration
<b>Water is Leaking</b>	Low spots, dips, or kinks are present inside or outside machine.	<ul style="list-style-type: none"> <li>• Insure end of drain hose is not submerged in water from property's drain source.</li> <li>• Re-route tubing to eliminate all low spots, kinks, valleys, and dips.</li> </ul>
<b>E1 Warning Light</b>	Sensor or Sensor Communication Issue	<ul style="list-style-type: none"> <li>• Check sensor cable connection is secure at both ends.</li> <li>• Replace Sensor</li> </ul>
<b>LO Warning Light</b>	Sensor believes temperature is below 10°C	If room temperature is low, raise the temperature and unit will function normally. If not, replace the sensor.
<b>HI Warning Light</b>	Sensor believes temperature is above 35°C	If room temperature is low., raise the temperature and unit will function normally. If not, replace the sensor.
<b>E5 warning Light</b>	Possible refrigerant leak	If the machine can dehumidify normally, you need to replace the main control board. If the machine cannot dehumidify, you need to refill the refrigerant.
<b>E4</b>	Problem with Pump	Verify that the pump is properly installed and functioning. If so, unplug the unit for two minutes, then restart.

# WARRANTY

Innovative Dehumidifier systems, LLC. warrants the equipment to be free from defects in workmanship and materials for a period of 24 months after shipment. This warranty is limited, however, to the repair or replacement of defective equipment. If it is necessary to return unit for service, customer is solely responsible for proper packaging, transportation costs. Customer must initiate warranty process by contacting IDS. Do not send any component or product back to IDS without Return Material Authorization.

This limited warranty does not apply to any part or component that is damaged in transit or when handling, has been subject to misuse, has not been installed, operated or serviced according to the Seller's instructions, or has been operated beyond the seller's – rated capacity or has been altered in any way. Routine maintenance is not covered by this warranty.

Seller's liability is limited to replacement of defective parts or components and does not include any cost of labor (including, but not limited to, labor to remove and/or reinstall any defective part), refrigerant or piping. Customer may elect to have unit fixed locally in which case required replacement parts will be sent to customer at customer's expense.

IDS shall not be responsible for loss of use of any product, loss of time, inconvenience, or damage to other equipment, or any other indirect or consequential damage with respect to property whether as a result of breach of warranty, neglect, or otherwise.

THE WARRANTIES AND LIABILITIES SET FORTH ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, IN LAW OR IN FACT, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. IDS total liability, regardless of nature of claim shall not exceed original purchase price of the product. If a product or component is replaced while under warranty, the applicable warranty period shall not be extended beyond the original warranty time period.

The foregoing shall constitute the total liability of seller in the case of defective performance of all or any of the equipment or services provided to Buyer. Buyer agrees to accept and hereby accepts the foregoing as the sole and exclusive remedy for any breach or alleged breach of warranty by Seller.