



SPECIFICATIONS

ATMOX RELAY - DEHUMIDIFIER 02-175-400

Use:	Allows external control of select dehumidifiers by ATMOX Controller
Input Voltage:	12 VDC
Output Max Switching Voltage:	300VAC / 150VDC
Output Max Switching Current:	2A
Mounting:	Mount internally to joist Two screw holes for mounting (Screws included)

WARNING

DO NOT ATTACH A HIGH VOLTAGE ACROSS OUTPUT. Output is switching only. Components are fuse protected. In the event that the fuse or relay is damaged due to overload or improper wiring, unit can no longer be used and will not be covered by ATMOX Product Warranty.

LIMITED THREE-YEAR WARRANTY

When installed, operated, used and maintained as intended in residential applications and according to the instructions supplied with ATMOX products, ATMOX warrants its products for a period of 3-years from the date of purchase against any defects in material and workmanship. The products covered by this warranty include the control boxes, fans, sensors and wiring manufactured by ATMOX. ATMOX will repair or replace, at ATMOX's option, any ATMOX product or component found to be defective within the 3-year warranty period.

ATMOX products are designed to improve conditions in the crawlspace, basement or attic, yet are limited by atmospheric and natural conditions over which ATMOX has no control and which are not covered by this warranty. ATMOX products are not warranted against damage caused by electrical surges, fire or other casualty, vandalism, or acts of God (including lightning strikes and floods). This warranty does not make representations regarding mold, insects, termites, water, rot, electrical, HVAC, roof, framing, foundation, floors, drywall, gutters, ice dams or other problems that may occur in a house structure. The warranty does not include any costs of removal or reinstallation.

Third-party products by other manufacturers sold by ATMOX (such as dehumidifiers) are not covered by this warranty but may be covered under separate warranties by the product's manufacturer. Purchaser should contact third party manufacturers for warranty claims and coverage of third-party products not manufactured by ATMOX.

ATMOX INC'S LIABILITY UNDER THIS LIMITED WARRANTY IS STRICTLY LIMITED TO REPAIR OR REPLACEMENT OF DEFECTIVE ATMOX PRODUCTS. OTHER THAN THE WARRANTIES EXPRESSLY DESCRIBED HEREIN, ATMOX DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ATMOX WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow certain limitations and exclusions of warranty, so these exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

WARNING: Cancer and Reproductive Harm – For more information, go to www.P65Warnings.ca.gov



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OVERVIEW



Refer to Controller Installation Guide to go through the Setup or Settings Menu to select use of dehumidifier. Adjust activation point if desired.

CONNECTION OF RELAY TO CONTROLLER

1. Unplug ATMOX controller from power while connecting wires.
2. Insert the Orange plug with the Yellow/Black wire into the Relay.
3. Use Terminal Blocks below DEHUMIDIFIER label.
4. Insert the end of YELLOW Wire underneath the terminal block labeled as POSITIVE (+). Tighten screw to hold in place.
5. Insert the end of BLACK Wire underneath the terminal block labeled as NEGATIVE (-). Tighten screw to hold in place.



EXTENSION OF YELLOW/BLACK WIRES

If wiring is not long enough to reach from dehumidifier to ATMOX Controller, then extend using low voltage cable and provided quick splice connectors. Keep polarity consistent across wires. It is recommended to extend the Yellow/Black wires to controller instead of the wires to dehumidifier.



Follow Low Voltage Wiring instructions in Controller Installation Guide.

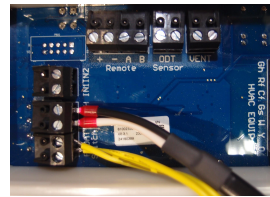
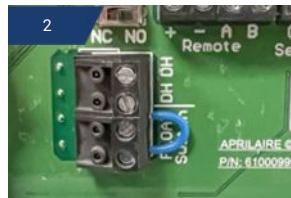
DEHUMIDIFIER SELECTION

Relay is used with dehumidifiers that can be controlled via terminal blocks. Contact ATMOX for more information on compatible models. Connection instructions for certain models are provided in this specification sheet.

CONNECTION OF APRILAIRE E-SERIES DEHUMIDIFIERS

Unplug components from power when connecting wires. Follow any instructions as outlined in manual provided by Aprilaire.

1. Remove control panel cover.
2. Check that switch set to NO.
3. Loosen the screws of terminal blocks labeled DH. Insert the ends of the Black and White Wires into the terminal blocks. (It does not matter which wire goes into top or bottom.) Tighten screws on terminal block to hold in place.
4. Put control panel cover back with wires coming out below.
5. Plug end of cable into Relay.



Float switch (Yellow wires) from condensate pump can be connected in Float Switch Terminal Blocks. Jumper Cable must remain in place if not connecting.

The Aprilaire dehumidifier will not be controlled properly by ATMOX controller without being in External Mode. Follow instructions on next page.

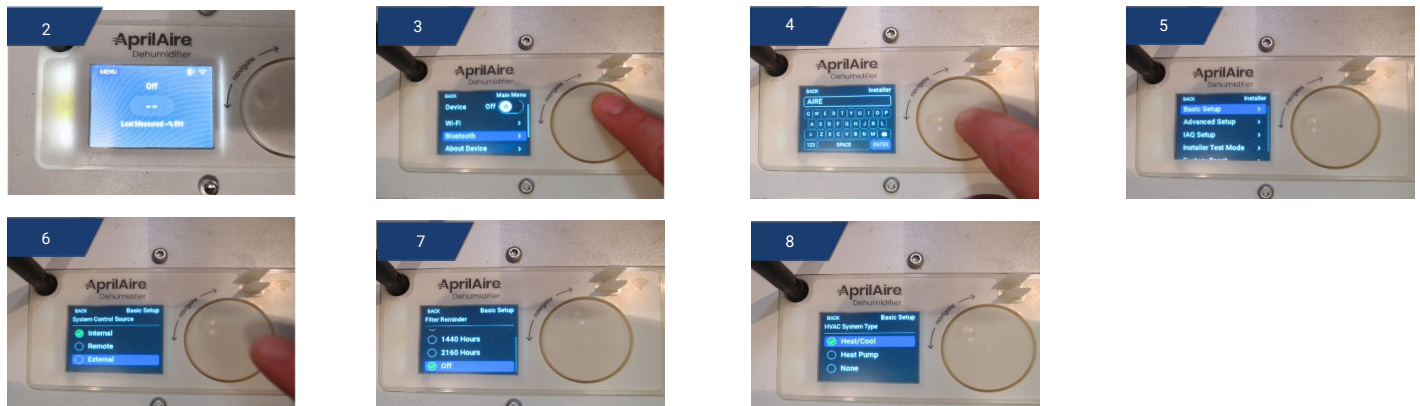
APRILAIRE DEHUMIDIFIER SETTINGS FOR EXTERNAL MODE

1. Plug in power cord of dehumidifier and turn switch on back of unit to ON. (Newer units do not have switch.)
2. On display panel, press MODE button one time to illuminate screen. OFF should be displayed. NOTE: Screen must remain illuminated to change settings.
3. Press and hold MODE button for 3-5 seconds until display reads REMOTE/DISABLED.
4. Press MODE button several times until display reads EXTERNAL.
5. Press up arrow button to change display to ENABLED.
6. Press MODE button several times until display reads DONE.
7. Wait until display reads OFF.
8. Press ON/OFF button to enable ATMOX Relay Kit to control dehumidifier. Display will read EXTERNAL.



APRILAIRE DEHUMIDIFIER SETTINGS FOR EXTERNAL MODE IN WIFI MODELS

1. Plug in power cord of dehumidifier.
2. Turn dial to select MENU button. Push to enter.
3. Turn dial to select Installer. Push to enter.
4. Enter the password AIRE by spinning dial to letters. Use Enter to proceed.
5. Turn dial to Basic Setup. Push to enter.
6. Under System Control Source, turn dial to External. Push to enter.
7. Under HVAC System Type, turn dial to None. Push to enter.
8. Under Filter Reminder, turn dial to Off. Push to enter.
9. Review settings. Turn dial to Save. Push to enter.

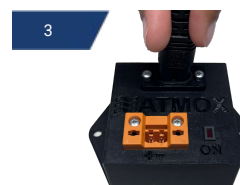


CONNECTION OF SANTA FE DEHUMIDIFIERS (ULTRA SERIES, OASIS105 & ADVANCE DRY110)

Unplug components from power when connecting wires. Follow any instructions as outlined in manual provided by Santa Fe.

CONNECTION ULTRA SERIES

1. If control dial is present, turn to OFF position (Not on all models.)
2. Loosen screws of terminal blocks labeled DEHU and 24V. Insert the ends of the Black and White Wires of Relay into the terminal blocks. (It does not matter which wire goes into DEHU or 24V.) Tighten the screws on terminal blocks to hold wires in place.
3. Plug end of cable into Relay.

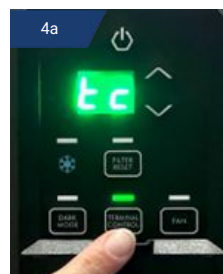


WARNING

Do not connect the relay wires directly to any COM or DMPR terminal block. Damage may occur.

CONNECTION OASIS105 or ADVANCE DRY110

1. Remove the control panel cover to access terminal blocks.
2. Loosen screws of terminal blocks labeled DEHUM and 24VAC. Insert the ends of the Black and White Wires into the terminal blocks. (It does not matter which wire goes into DEHUM or 24VAC.) Tighten the screws on terminal blocks to hold wires in place.
3. Put control panel cover back with wires coming out below.
4. a) On Oasis105, press the Terminal Control button on dehumidifier to allow for external control.
b) On Advance Dry110, push the RH setpoint button until EXT is illuminated.
5. Plug end of cable into Relay.



CONNECTION OF SEAIRA GLOBAL DEHUMIDIFIER MODELS

At present, Seaira Global Dehumidifiers require an external power source to use the ATMOX relay.

The following must be purchased separately: Power supply providing 24V AC, Wire Nut, and spare low voltage wire (16 gauge recommended but could be slightly higher or lower).

1. Loosen the screws on terminal blocks A3 and A4 on the dehumidifier.
2. Bring the black and white wires from the ATMOX relay to the dehumidifier location.
3. Insert the end of one wire under A3 and tighten the screw. (Polarity does not matter. Black shown in photo.)
4. Locate the electrical outlet being used for the power supply.
5. Cut two wires long enough to connect the power supply to the dehumidifier. Strip both ends of these wires to expose the metal.
6. Connect one end of each wire to the power supply terminals. (Use either terminal - polarity does not matter. Wrap wire around screws if needed for a secure fit.)
7. Bring the other ends of the power supply wires to the dehumidifier.
8. Connect one of these these wires to A4 and tighten the screw.
9. Join the other wire to the remaining ATMOX relay wire (White shown in photo) using a wire nut.
10. Plug in both the power supply and the dehumidifier.
11. The dehumidifier will turn on/off automatically when controlled by ATMOX controller, with a slight time delay.



Prior to connecting ATMOX relay to Watchdog 550 and older NXT models (with serial numbers not beginning with 'J'), follow these steps:

1. Remove the large side panel by unscrewing all eight screws. This is typically the side opposite the drain line.
2. Inside, locate and remove the silver cover on the left side by unscrewing the two screws.
3. On the circuit board, ensure the small switch is in the 'ON' position. Confirm or switch its position.
4. Reattach the silver cover and side panel.

Note: For these models, once the circuit board switch is turned 'ON', the dehumidifier will not operate normally unless the switch is returned to the 'OFF' position. Newer models will automatically transition without this requirement.

