



Model A65 Humidifier Control

Installation Instructions

READ AND SAVE THESE INSTRUCTIONS

The Model A65 humidifier control is for use with any humidifier requiring an ON/OFF signal for a 24 volt circuit.

SAFETY INSTRUCTIONS

WARNING

1. Improper installation may cause property damage or injury. Installation, service, and maintenance must be performed by a qualified service technician.
2. 120 Volts may cause serious injury from electric shock. Disconnect electrical power before starting installation or servicing. Leave power disconnected until installation/service is completed. This control is not a 120 Volt (line voltage) device.

CAUTION

1. Read all instructions before beginning installation.
2. Do not adjust humidity set-point above recommended level or to recommended level if condensation occurs on inside surface of windows or on other surfaces. Excess condensation can cause damage to structure or furnishings. Excess moisture can also allow the possibility for mold growth to occur.
3. Do not use solvents or cleaners on or near the display and circuit board. Chemicals can damage components.

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OVERVIEW

The Anden® Model A65 Humidifier Control provides control of the humidifier from the grow space. The control allows for adjustment of the humidity setting and to turn the humidifier on and off from a convenient location. The Model A65 uses an onboard sensor to monitor the relative humidity in the space in which it is located and displays the measured relative humidity on the digital display.

SPECIFICATIONS

ELECTRICAL	
Input Voltage and Current	Voltage: 24V AC +/-20% Current: 25mA (nominal), 50mA (max) at 24V AC
Output	Dry Contact, Normally Open – H Terminals

CONTROL	
Humidity Setting Range	10% – 90% RH
Accuracy	+/-5% RH
Differential	3%
Low Temp	40°F
High Temp	99°F

MATERIALS PROVIDED

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- Wall-Mount Control
- Mounting Screws
- Drywall Anchors

MATERIALS NOT PROVIDED

- Wires
- Wire Nuts

LOCATION RECOMMENDATIONS

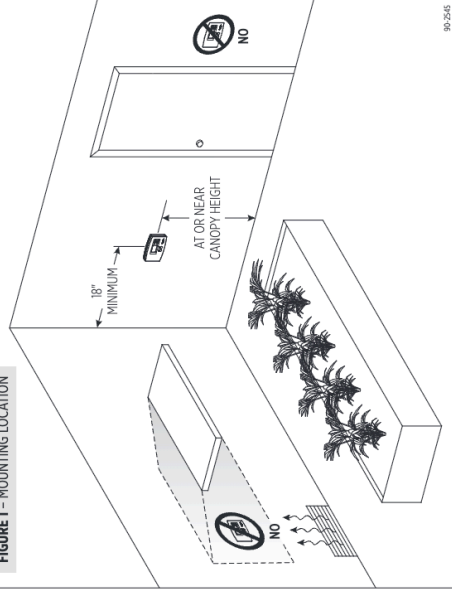
MOUNT CONTROL

- In an area where moisture levels need to be monitored and controlled.
- On an interior wall.
- At or near canopy height.
- At least 18" from an outside wall.

DO NOT MOUNT CONTROL

- In the flow of a supply register.
- Behind doors, in corners or other dead air spaces.
- In direct sunlight, near lighting fixtures, or other appliances that give off heat.
- On an outside or unconditioned area wall.
- In stairwells or near outside doors.
- On a wall with concealed pipes or ductwork.

FIGURE 1 – MOUNTING LOCATION



INSTALLATION

MOUNT CONTROL

See **FIGURES 2 & 3**.

1. Remove front cover by pulling straight out.
2. Position the back plate on the wall and mark the locations for the wire access hole and the mounting screws. **Note:** The mounting holes can also be used to secure the back plate to a standard horizontally mounted junction box.
3. For mounting on drywall, drill two 3/16" dia. mounting holes and a 3/4" opening for the wires.
4. Insert the drywall anchors provided into the mounting holes flush with the wall surface.
5. Run 4-wire cable from the humidifier to the control location.
6. Secure back plate using the two #8 x 1-1/2" screws provided.
7. After connecting the wires, tuck excess wire into the wall and fill the opening with insulating material. Failure to seal the opening may result in inaccurate operation due to drafts.

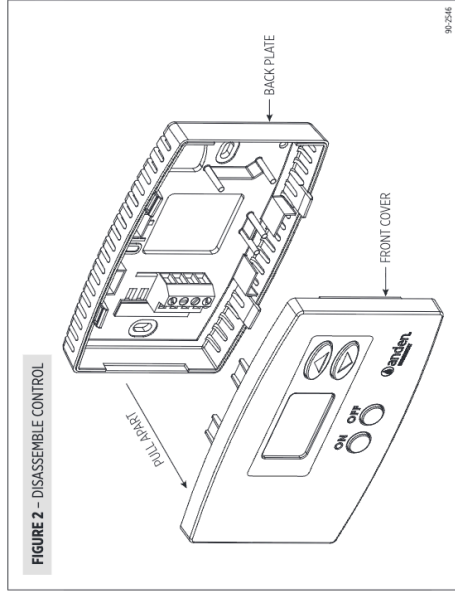


FIGURE 2 – DISASSEMBLE CONTROL

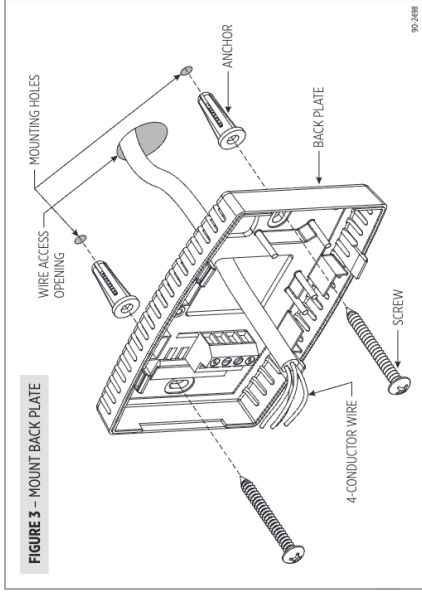


FIGURE 3 – MOUNT BACK PLATE

WIRING MODEL A65 WITH MODEL AS35 OR AS35FP STEAM HUMIDIFIER

The Model A65 control requires 24VAC. See **FIGURE 6**.

1. Disconnect power from the steam humidifier and HVAC system.
2. Connect 24VAC to the C and R terminals on the Model A65.
3. Connect the H terminals on the steam humidifier to the H terminals on the Model A65.
4. Snap the Model A65 front cover on the back plate. The 4-pin terminal aligns with the terminal block receptacle on the back plate.
5. Proceed to **SYSTEM CHECKOUT** on page 8.

FIGURE 6 – RECOMMENDED WIRING FOR MODEL A65 CONTROL AND MODEL AS35 STEAM HUMIDIFIER

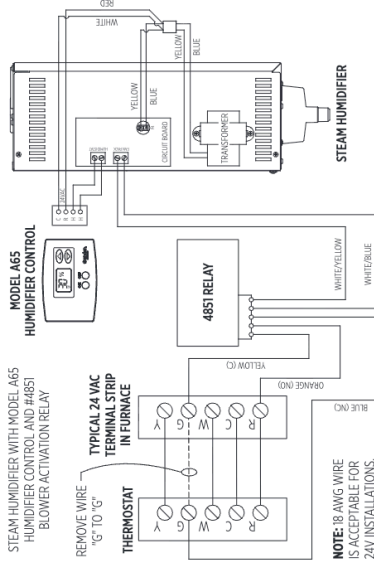
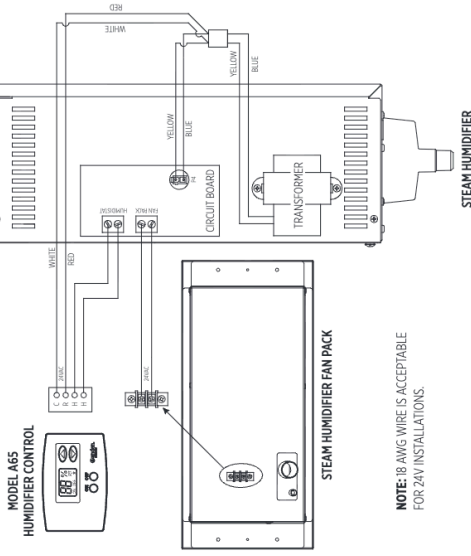


FIGURE 7 – RECOMMENDED WIRING FOR MODEL A65 CONTROL AND MODEL AS35FP STEAM HUMIDIFIER

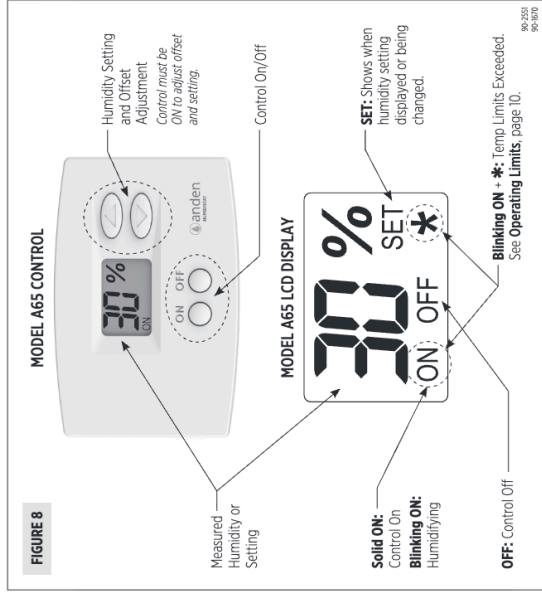


SYSTEM CHECKOUT

POWER UP

1. Check all wiring.
2. Restore power to the HVAC system and humidifier.
3. After a 4 second start up sequence all buttons on the Model A65 will be functional.

- The control will be OFF.
- The humidity setting will be 35%.
- The control will display the measured humidity.



TEST MODE

1. Press and hold the ON button for 5 seconds to enter Test Mode.
 - a. Verify all LCD segments blink every second.
 - b. Verify humidifier turns on.
2. After 5 minutes or after pressing the OFF button, the control will enter Off mode.
 - a. Verify the humidifier turns off.

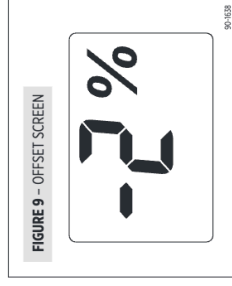
HUMIDITY SETTING

- The control must be ON to adjust the humidity setting.
- The ▲ (up) and ▼ (down) buttons are used to increase or decrease the humidity setting.
- The first press of either button will display the current setting on the LCD display and **SET** will be displayed below the % sign.
- Each subsequent push of the ▲ or ▼ buttons will change the setting by 1%.
- If a button is held down, the setting will continually change by 1% every 1/2 second for as long as the button is pressed.
- The control will return to Normal Mode, displaying the measured humidity, 5 seconds after the last button press/release.

OFFSET

An offset can be applied to the humidity reading to avoid discrepancies with other humidity measuring devices. Allow 48 hours for the control to acclimate before applying an offset. The control must be ON to enter the Offset screen.

- Press and hold the OFF button for 5 seconds to enter the Offset screen. See **FIGURE 9**.
- The ▲ ▼ buttons can be used to set an offset value between -5% RH and +5% RH.
- The control will return to Normal Mode, displaying the measured humidity, 5 seconds after the last button press/release.



TURNING ON AND SETTING THE CONTROL

1. Press the ON button.
2. Use the ▲ ▼ buttons to set the control to desired RH percent.
 - ▲ Increasing the humidity setting will increase humidifier run time, resulting in higher humidity levels.
 - ▼ Decreasing the humidity setting will decrease humidifier run time, resulting in lower humidity levels.

SEQUENCE OF OPERATION

Normal Mode

- When the measured humidity is lower than the setting, the control will activate the humidifier, and **ON** will blink on the LCD display.
- When the measured humidity increases to 3% RH above the setting, the control will deactivate the humidifier, and the LCD will display a solid **ON**.

Operating Limits

- If the control senses temperature below 40°F or above 99°F, the control will not allow the humidifier to operate, and **ON** and ✱ will blink on the display.
- The control will resume normal operation once the temperature is within the specified limits.

TROUBLESHOOTING

Technical Support is available Monday through Friday, 7:00 a.m. to 5:00 p.m. CST, at (800) 972-3710. Use the guide on the following page to help find and correct system faults. Contact Technical Support before replacing the control or for additional troubleshooting.

ERROR CODES

When the control detects an internal error, it will stop controlling, deactivate the humidifier, and the LCD will display the Error Code. See **FIGURE 10**. The control will attempt to recover from the error every 10 minutes. The Error Code will continue to be displayed as long as the error condition exists. Button presses are not registered when in Error Mode. Cycling power to the control will not clear the code and the control will need to be replaced.

TABLE 1 – TROUBLESHOOTING GUIDE

Symptom	Possible Reason	Troubleshooting Procedure
No power to the control.	Incorrect wiring. No power to humidifier. No power to HVAC equipment.	Verify wiring connections between control humidifier and HVAC system (where applicable). <ul style="list-style-type: none">• Verify that the humidifier is wired correctly.• Verify the circuit breaker has not tripped.• Verify HVAC system switch is on.• Verify the circuit breaker has not tripped.
Control does not turn on humidifier.	Incorrect wiring.	Verify wiring connections between control and humidifier.
Display does not blink all LCD segments during Test Mode.	LCD error.	Replace control.
Display shows EE .	Control detected an internal error. Control recently installed after being stored in an uncontrolled temperature and humidity environment.	Replace control. Allow 48 hours for control to acclimate.
Inaccurate humidity reading.	Offset has been applied to the humidity reading. Control is mounted in direct sunlight, above a heat or humidity source, or in the path of a supply register.	Change the offset. Relocate the control.

FIGURE 10 – ERROR CODE SCREEN



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