

Automatically Turns on Ventilation Fan to Help Reduce Condensation



The Leviton Humidity Sensor and Fan Control automatically detects excess humidity in a room and activates the ventilation fan to lessen condensation, which helps reduce mold and mildew. Additionally, the device helps reduce energy usage by automatically operating the fan only when needed.

The sensor uses a microprocessor combined with state-of-the-art digital sensing technology to continuously monitor and manage humidity levels when installed in areas of the home prone to condensation and mildew. It features user-friendly controls to adjust sensitivity, humidity level and time out settings. The sensor can replace a single pole switch (DHS05) or a combination switch (DHD05) and can be used with most bathroom or ventilation fans or fan/light combinations. These devices offer flexible installation options, including wiring with a neutral or by using an earth ground connection, and a slim profile for ease of installation.

Applications

Contemporary in design, the Humidity Sensor and Fan Control is the ideal solution for controlling ventilation in areas of high humidity, dampness, or rooms prone to condensation and mildew such as:

- Bathrooms
- Basements
- Laundry Rooms
- Home Spas



Features and Benefits

- Replaces a single pole switch for control of a ventilation fan or fan/light combination, or a combination switch for separate control of fan and lighting
- For use with ventilation fans up to ¼ HP
- Compatible with LED, CFL, Incandescent, Halogen, MLV and ELV lighting loads
- Flexible wiring can be connected to Neutral wire if Neutral is present in the wallbox; or to Earth ground if no Neutral wire is present in the wallbox
- Interchangeable line and load wires (DHS05 only)
- Microprocessor control with digital sensing technology
- Zero Cross turn-on technology extends the life of switching relays
- Advanced sensing enhances detection when the room is occupied and minimizes false triggers when unoccupied
- Operating Modes for bath fan, air cycle and humidistat
- Test mode to help determine proper sensor placement and setting adjustments that need to be made for optimal operation
- Compatible with Decora® and Decora Plus™ wallplates
- Color change kits available in White, Ivory, Light Almond, Gray, Black and Brown

User Adjustable Settings

Decora Humidity Sensor and Fan Controls are easy to program by simply pressing the sensor's push pad. No tools are required and there is no need to remove the faceplate or wallplate.

Setting 1	TIME	Adjust the time that the fan will stay ON: 10, 20, 30 or 45 minutes
Setting 2	SENSITIVITY	Adjust the humidity sensitivity: Max, High, Medium, Low
Setting 3	OPERATING MODE	Set the Operating mode: Bath Fan, Air Cycle, Humidistat

Each mode will allow for automatic, manual or bypass operation

Automatic Fan Control

- Built-in timer sets the “minimum ON time” for the ventilation fan. Timer settings can be set to 10-, 20-, 30- or 45-minute intervals
- The sensor will continue to operate the fan for the minimum set time and will sample the humidity level at the end of that time period, and reactivate if necessary (up to 2 more times)
- Sensitivity level adjustment allows the user to adjust the sensitivity level of the sensor to prevent false cycling
- Automatic Ventilation/Air Cycle mode for continuous operation with hourly pre-set time outs

Manual Fan Control

- The device can be manually turned on by pressing the fan icon to address immediate ventilation needs and will turn OFF automatically after the set time-out period

Bypass Control

- Bypass can be used to temporarily disable the Auto-ON functionality for each setting

Installation Recommendations for Bath Fan Control

- The Humidity Sensor and Fan Control will not independently eliminate condensation, it must be used with a properly sized and rated ventilation fan
- It is recommended that in large spaces the DHS05 or DHD05 Humidity Sensor and Fan Control be placed close to the shower/tub (steam/vapor source) to effectively measure and monitor for excess humidity
- Ceiling heights more than 8 feet may affect the sensor's ability to properly detect shower/tub steam
- The sensor requires a closed room to properly operate. Opening a door during operation may temporarily interrupt the operating cycle
- Changes in season may affect operation of the sensor due to air temperature and humidity. An adjustment to the Sensor's Sensitivity setting may be required

Typical Specifications

- Operating temperature range: 0° to 40° C
- Non-operating temperature (storage) range: -20° to 60° C
- Humidity: 0 to 95% non-condensing
- Indoor applications only

Agency Standards and Compliance

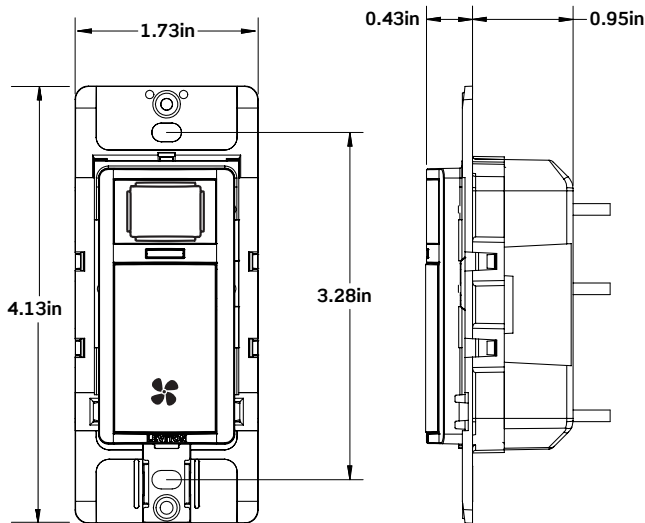
- CSA
- Standards UL 873 and C22.2 No. 24
- Can be used to comply with the requirements of 2019 and 2022 California Title 24, Part 6, Indoor Air Quality and Mechanical Ventilation
- Can be used to comply with the requirements of 2019 and 2022 CALGREEN, Part II, Indoor Air Quality and Exhaust
- Meets requirements of ASHRAE 62.2

Warranty Information

- Five-year limited warranty

Dimensional Drawings

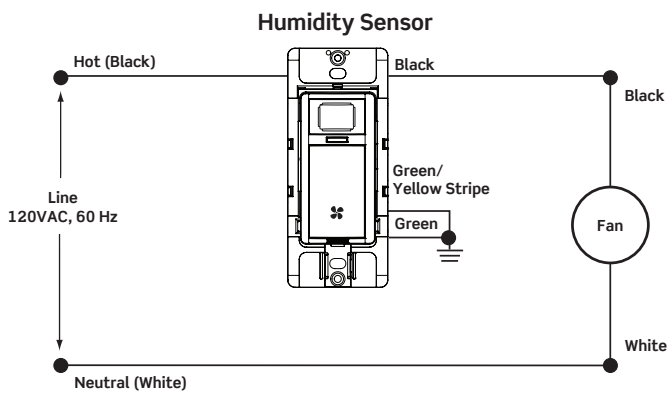
Cat. No. DHS05 & DHD05



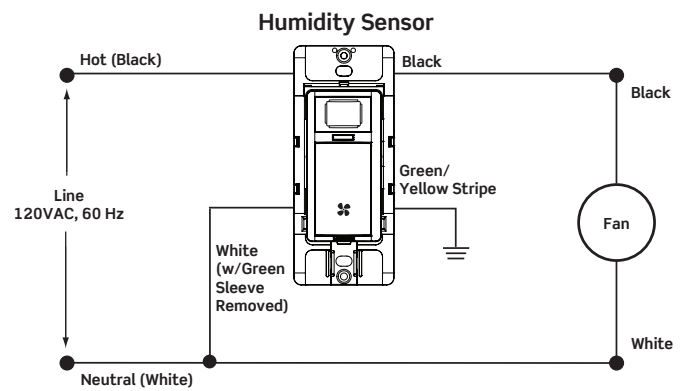
DHS05 Shown

Wiring Diagrams

Cat. No. DHS05

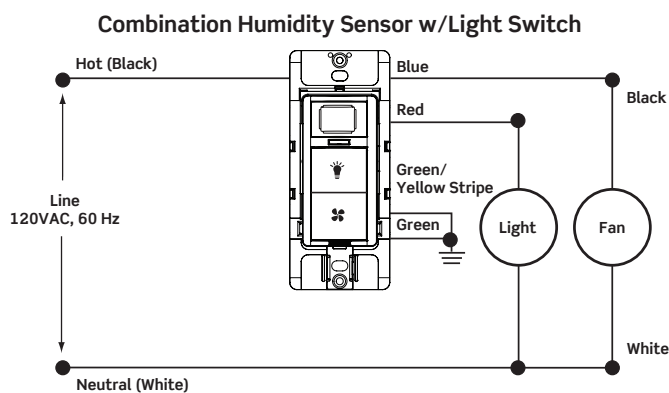


Single Pole, No Neutral Wire

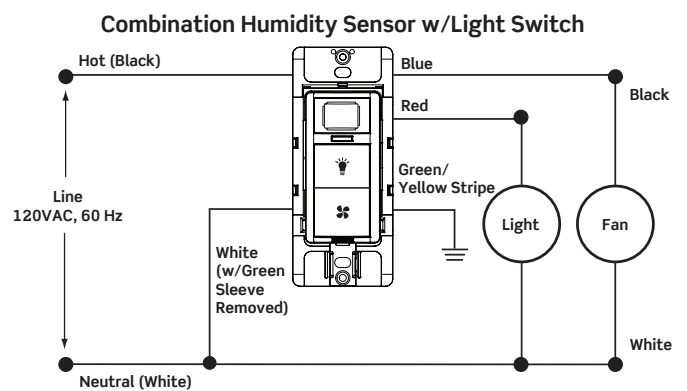


Single Pole, with Neutral Wire

Cat. No. DHD05



Single Pole, No Neutral Wire



Single Pole, with Neutral Wire

Ordering Information

Description	Cat. No.	Rating (120VAC, 60Hz)	Color
Humidity Sensor & Fan Control, Single Pole	DHS05-1LW	300W LED/CFL 600W Incandescent/Halogen 400VA ELV/MLV 1/4 HP Motor	White
Humidity Sensor & Fan Control, Single Pole	DHS05-1LI	300W LED/CFL 600W Incandescent/Halogen 400VA ELV/MLV 1/4 HP Motor	Ivory
Humidity Sensor & Fan Control, Single Pole	DHS05-1LT	300W LED/CFL 600W Incandescent/Halogen 400VA ELV/MLV 1/4 HP Motor	Light Almond
Combination Humidity Sensor and Fan Control with Light Switch, Single Pole	DHD05-1LW	Fan Load (Blue Wire) 1/4 HP Fan 300W LED/CFL 600W Incandescent/Halogen 400VA MLV/ELV Light Load (Red Wire) 150W LED/CFL 250W Incandescent/Halogen 200VA MLV 250VA ELV 2A Resistive	White
Color Change Kit, No Fan Icon	DOSKT-00	N/A	W, I, T, G, E, B
Combination Color Change Kit, No Icons	DHDKT-00	N/A	W, I, T, G, E, B

Color change kits available in the following colors: White (-W), Ivory (-I), Light Almond (-T), Gray (-G), Black (-E), Brown (-B)



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Mon-Fri 8am-10pm EST, Saturday 9am-7pm EST, Sunday 9am-5pm EST

For 24/7 product support visit www.leviton.com/support

Visit our Website at: www.leviton.com/humiditysensor

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