

BROAN NuTone Model 82A, 82W, P82W, P82WC Premium Humidity Sensing Wall Control

Installation Instructions

INCLUDED

Instruction Sheet

Note: Wall plate not included – Use Broan Part No. S97012925 (or equivalent)

CONTROL SPECIFICATIONS

- cULus listed
- 120 VAC 60 Hz Line Power
- 9A Max. Total Load (Fan + Control)
- When used in combination with lighting fixtures that are switched together, the device rated for the following lumens: 800W Incandescent, 150W LED, 150W CFL, or 400VA Inductive Ballasted Fluorescent Lamps
- Typical wire sizes: 12AWG (MAX) or 14AWG solid or stranded copper wire
- Operating temperature: 0-50°C (32-122°F)

SAFETY

Before installing control, switch power off at service panel and lock the service panel. Do not connect power until control is switched on accidentally. When the service disconnecting switch cannot be locked, securely fasten a warning device, such as a tag, to the service panel.

Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards.

1. Use copper wire only.

2. CAUTION: Risk of Electric Shock - More than one disconnect switch may be required to de-energize the equipment before servicing.

3. WARNING: This device shall not be used in combination with a wall switch controlled by a receptacle.

4. Metal wire nuts or approved junction box sized 50.8 x 76.2 mm (2.0 x 3.0 x 3.0 in.) or larger, minimum volume 295 CM³ (18.0 in.³).

5. Requires a neutral wire for operation.

6. Note: When power is applied, the Model 82W requires approx. 30 seconds boot up and be ready to function.

ON/OFF Switch and LED (Fan ON/OFF Indicator)

Ground Wire

C Potentiometer Adjustable Dial Settings - Remove lower cover on control face (factory default settings shown.)

CONTROL MODE SETTINGS (POTENTIOMETER ADJUSTMENTS)

AUTO SENSE / RH% / CYCLE Potentiometer:

AUTO SENSE Mode:

The control has an automatic sensing mode (AUTO SENSE) that senses increasing changes in humidity level (i.e. Sense on RISE). Once the control has sensed the fan will run and activate continuous cycles every hour. After 20 hours from the humidity source (e.g. shower head or faucet), Fan activation may take longer if the Control is located further than 8 feet from the humidity source. The fan will remain ON based on the user adjustable TIME function (see TIME section).

TIME: User adjustable from 10-60 minutes per hour, in 10 minute increments

AUTO SENSE / RH% / CYCLE: AUTO SENSE

Sensitivity: Active; user adjustable from LO to HI

Control Function:

SENSE ON RISE: ACTIVE

Sensitivity: ACTIVE

CYCLE (Air Cyclic) Mode:

The control provides a pre-set ventilation ON TIME for meeting continuous ventilation codes. After the initial ON time is set by manually turning the fan ON, the control will provide continuous activation cycles every hour. After 20 hours from the humidity source (e.g. shower head or faucet), Fan activation may take longer if the Control is located further than 8 feet from the humidity source. The fan will remain ON based on the user adjustable TIME potentiometer setting.

To calculate the applicable TIME potentiometer setting, use the following formula: TIME potentiometer setting = (required CFM / fan CFM) x 60

TIME: User adjustable from 10-60 minutes per hour, in 10 minute increments

AUTO SENSE / RH% / CYCLE: CYCLE

Sensitivity: Active; user adjustable from LO to HI

Control Function:

SENSE ON RISE: ACTIVE

Sensitivity: ACTIVE

RH% (Humidistat) Mode:

The control has a RH% mode with a user adjustable threshold relative humidity level. The RH% setting can be adjusted from 20 to 80% RH in 10% increments. Once the threshold is met, or if SENSE ON RISE detects an increase in humidity, the fan will turn ON. After 20 hours from the humidity source (e.g. shower head or faucet), Fan activation may take longer if the Control is located further than 8 feet from the humidity source. The fan will remain ON based on the user adjustable TIME function.

TIME: User adjustable from 10-60 minutes per hour, in 10 minute increments

AUTO SENSE / RH% / CYCLE: RH%: user adjustable from 20-80% in 10% RH increments

Sensitivity:

SENSE ON RISE: ACTIVE

Sensitivity: INACTIVE

When room humidity reaches RH% potentiometer setting:

- Fan (and LED) will turn ON until another event occurs, or it is still occurring (i.e. ambient humidity is still at or above RH% setpoint, ambient humidity reaches the RH% setpoint again or Sense on Rise detects a rise in humidity level).

Control Function:

SENSE ON RISE: ACTIVE

Sensitivity: INACTIVE

WIRE CONNECTIONS:

Wire terminals accept up to #12 AWG MAX solid and stranded wire.

1. Remove

① Grasp sides of lower cover and pull straight outward

2. Install

② Align tabs on switch cover with holes in metal panel and push straight inward

WIRE INSTALLATION & WIRING DIAGRAM

Wire [3/4" (1.9 cm)]

Washer

Screw

Wire under Washer

& Screw Head

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