



CONTROLS
Humidification
or
Dehumidification
or
Ventilation

Universal, Programmable Touch Screen Thermostat Controls Humidity!

Humidification Control (automatic or manual)
or
Dehumidification Control
or
Fresh Air Ventilation Control

Includes: *Event-Based™ Air Cleaning* and *wired outdoor temperature sensor*

Aprilaire Model 8620 Thermostat

Features of the Model 8620 Thermostat

Operation

Humidity Control

Humidifier

Automatic humidity setpoint adjustment (must use ODT) or Manual Control

Displays indoor RH on User Interface

Notifies when humidifier is active

Dehumidifier

Operates whole house dehumidifier or air conditioner to dehumidify

Displays indoor RH on User Interface

Notifies when dehumidifier is active

Energizes HVAC blower when dehumidifying

Fresh Air Ventilation

Provides fresh air with a motorized damper or an ERV/HRV

Notifies when ventilation is active

Control limits based upon outdoor temperature and RH

Can be set up to use ASHRAE 62.2 guidelines or timed ventilation

Air Cleaning

Event-Based™ Air Cleaning – 4 selectable air cleaning events

- Constant Cleaning (24/7)
- Automatic (30 min/hr)
- Event Clean (3 Hr Cycle)
- Allergy (24 hr Cycle)

Notifies when air cleaning is active

Controls EAC with dedicated 24 V AC dry contact

Temperature Control

Universal Programmable Thermostat - 2H/2C Conventional or 4H/2C Heat Pump

Selectable, 7 day, 5/2, 5/1/1 or non programmable

Heat Blast™ allows one touch control of heating to raise room temperature 3°F to 5°F

2 or 4 events/day

Screen lock-out to prevent unauthorized adjustments

Stage rate control uses equipment run time to control HVAC equipment staging

Progressive Recovery feature ensures that the setpoint is reached by the scheduled time.

Service reminders

- Humidifier, water panel®, dehumidifier, HVAC

Easy to remove battery cover — designed for dealer branding program

Built-in equipment protection

Equipment stage indication

High and low setpoint temperature limits

Five year warranty

“Copy” function for quick and easy programming

Multiple hold options maximizes comfort and energy savings

Permanent memory — programming, time and date are not lost during a power outage

Screen

Large 10.3 sq. in. touch screen

Large font size

Fully back lit w/ constant low intensity light option

Exclusive message center (provides feedback and real language instructions)

Displays outdoor temp (w/ included 8052 sensor)

Real language programming/set up — no manual needed, no codes to memorize

Thermal Specifications

Control range: 40° to 99°F (4° to 37°C)

Display range: 32° to 99°F (0° to 40°C)

Accuracy: ± 1°F (± .5°C)

Storage temperature: -30° to 140°F (-34.4° to 60°C)

Operating humidity: 5% to 90% relative humidity (non-condensing)

Operating ambient temperature: 32° to 120°F (0° to 48.9°C)

Shipping temperature range: -30° to 140°F (-34.4° to 60°C)

Accessories

8052 Outdoor Temperature Sensor Included

8051 Flush Mount Indoor Temperature Sensor

8053 Surface Mount Indoor Temperature Sensor

Dimensions

4 15/16” High x 6” Wide x 1 5/16” Deep

Electrical Specifications

24 VAC (18-30 VAC)

1 amp maximum load per terminal

2.5 amp total maximum load (all terminals)

AC Power: 18-30 Volt AC

DC Power: 3.0 Volts DC (2 “AA” Alkaline batteries included)

Standard systems: gas, oil, electric

Single stage/multi-stage/heat pump/heat cool

Millivolt systems

Terminal Designations:

I2, C, I1, O/B, Y, Y2, G, RC, R, W2, W, L, S2, S1, T1, T2

Installation

Dual Powered — battery-powered and/or hard wired

24 VAC power recommended with battery back-up

Dual fuel operation (auto lockout of compressor w/ call for back-up heat)

Integrated dual fuel kit w/ high and low balance point control (using included 8052 sensor)

Remote indoor sensor option w/ 8051/8053 sensors

Configurable manual heat/cool or auto changeover

Configurable heating and cooling, heating only or cooling only operation

Adjustable differential for 1st, 2nd, 3rd and 4th stages