

SPECIFICATION SHEET DEHUMIDIFIER MODEL 1850

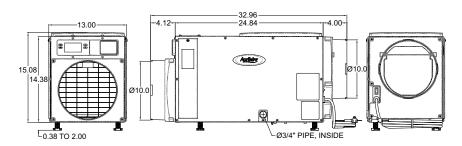
PRODUCT SPECIFICATIONS		
Capacity ⁽¹⁾	95 ppd	
Energy factor ⁽¹⁾	2.2 L/kW-h	
Airflow @ varying E.S.P. (external static pressure - dry coil)		
0.0" w.c.	265 CFM	
0.2" w.c.	230 CFM	
0.4" w.c.	200 CFM	
Voltage, Phase, Frequency	120V, 1, 60 Hz	
Current draw ⁽¹⁾	8.0 A	
Noise	54 dBA ducted	
Dimensions (cabinet)	Width: 12.5" cabinet Height: 14.5" cabinet Length: 27.5" cabinet	
Weight	75 lbs	
Operating conditions		
Inlet air operating conditions Ambient/Ventilation	50°F - 104°F, 40°F dew point min. 40°F - 140°F, 0% - 99% RH	

⁽¹⁾ Rated capacity and Energy Factor test done and current draw measured in accordance with AHAM DH-1 2008 at 80°F/60%RH inlet air at 0.0 ESP.

PRODUCT FEATURES	
Controls ⁽²⁾	Built-in digital control with display, top or front mount
Cabinet insulation	1/2" EPS
Air discharge orientation	Top or end
Inlet/Outlet duct collars	10" dia.
Backdraft damper at Outlet	Included
Filter	1/2" washable, MERV 8
Refrigerant	R410A
Coil corrosion resistance	E-Coated coil
Power cord	Plug type
Hardwire option	Yes, special option 1850 WD
Discharge air temperature rise	10°F-30°F
Drain connection	3/4" PVC adapters ⁽³⁾
Warranty	5 Years
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⁽²⁾ Built-in automatic control capable to be set up for dehumidification, humidification, and ventilation or zoning.





PRINCIPLE OF OPERATION

The Aprilaire Model 1850 is designed to dehumidify the air coming into the unit by passing the incoming air over an evaporator coil to drop the air temperature below the dew point of the air. Moisture is removed from the air and drained out of the unit to a common floor or waste drain. The air is then reheated in the condenser coil and exits the unit.

Dehumidification occurs until the set point is reached, then shuts off until periodic sampling determines a need for operation.

APPLICATION

The Aprilaire Model 1850 is the perfect product for smaller homes, townhomes, condominiums and crawlspaces.

VENTILATION

The Model 1850 has the ability to bring in fresh air. Fresh air will dilute stale air and pollutants and will reduce humidity in the winter months. The fresh air is brought in through a 6" round duct and 6" round normally closed damper. The dehumidifier has built in controls to adjust the amount of fresh air that is brought in.

⁽³⁾ Adapters for threaded connection or plastic hose included.

Installation options for the Aprilaire 1850 Dehumidifier

Shown in horizontal applications, can be installed in vertical applications as well.

APPLICATIONS

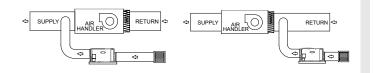
Main Return to Main Return - RECOMMENDED

- This application can be used when a supply duct is not available
- Air is pulled from the return duct, dehumidified, and returned to the return duct
- Assures that the dehumidified air is mixed with rest of the air in the duct before it re-enters the house
- This application is used in basements, attics, crawl spaces, etc.

SUPPLY AIR HANDLER RETURN

Dedicated Return to Main Supply or Dedicated Return to A/C Return

- This application can be used when a return or supply duct is not available
- Air is pulled through a dedicated return grille, dehumidified, and returned to the supply plenum or return



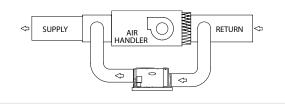
Dedicated A/C Return to A/C Return

- For homes without duct work
- · Dries a specific area that has a moisture issue
- Dehumidifier can be located in a closet, mechanical room or unfinished area and ducted into a finished room



Main Return to Main Supply

- Air is pulled from the return duct, dehumidified, and returned to the supply plenum
- This application is used in basements, attics, equipment closets, etc.



Optional Wall Mount Controls:

Model 76 Dehumid Control



- On/Off buttons
- Wall mounted living space control
- Displays RH and controls to an RH value
- Remote control for crawlspace applications and sealed attics

Model 8620 Universal Programmable Thermostat



- On/Off buttons
- Wall mounted living space control
- Displays RH and controls to an RH value
- Remote control for crawlspace applications and sealed attics

8910 Module Universal Programmable Thermostat



- · Large touch screen display
- 2H/2C conventional or 4H/2C heat pump
- Two part control 3 wire design
- · Notifies when ventilation is active
- Built in RH sensor
- Outdoor temperature sensor included
- Design to meet ASHRAE 62.2 ventilation guidelines
- Optional high or low outdoor temperature lockout
- Capable to control humidification, dehumidification, ventilation and air cleaning



