

Crawl Space Dehumidifier

Model 1820 | Specification Sheet

SPECIFICATIONS				
Capacity ⁽¹⁾		70 ppd		
Energy Factor (1)		2.1 L/kW-h		
Airflow @ varying E.S.P. (external static pressure - dry coil)				
	0.0" w.c.	200 CFM		
	0.2" w.c.	170	CFM	
	0.4" w.c.	140	CFM	
Voltage, phase, frequency		120VAC, 1 p	120VAC, 1 phase, 60 Hz	
Current draw (1)		5.8 Amps		
Noise		53 dBA ducted	58 dBA unducted	
Dimensions:	Width	12.	12.5"	
(cabinet only) (2)	Height	12.	12.5"	
	Length	25.0"		
Weight		56 lbs.		
Inlet air operating conditions during				
-Dehumidification:			50°F - 104°F, 40°F dew point min.	
-Ventilation:		40°F - 140°F, 0% - 99%RH (non-condensing)		

⁽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. (2) Height does not include adjustable feet. The width excludes the filter doors and length excludes the duct collars.

FEATURES				
Control (3)	Built-in digital control with display			
Control mounting option	Front mount only			
Cabinet insulation	½" EPS			
Air discharge orientation	End of cabinet only			
Inlet/Outlet duct collars	8" dia.			
Backdraft damper at outlet	N/A			
Filter	½" washable MERV 8			
Refrigerant	R410A			
Coil corrosion resistance	Aluminum			
8' Power cord	Plug type			
Hardwire option	No			
Discharge air temperature rise	10°F - 30°F			
Drain connection (4)	3/4" MNPT Threaded			
Warranty	5 Years			

⁽³⁾ Built-in automatic control capable to be set up for dehumidification and ventilation or zoning.



PRINCIPLE OF OPERATION

The Aprilaire Model 1820 Dehumidifier 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.

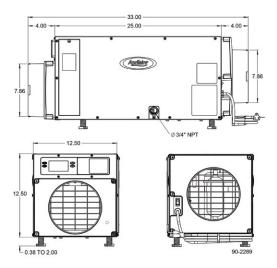
Dehumidification occurs until the set point is reached, then shuts off until periodic sampling determines a need for operation.

APPLICATION

The Aprilaire Model 1820 Dehumidifier is the perfect solution for controlling humidity in crawl spaces; protecting against structural damage, pests and mold.

CIRCULATION

The Model 1820 can also be programmed to circulate the air within a crawl space. Circulating the air evens out relative humidity levels and temperature in the space, eliminating variations in the environment.



⁽⁴⁾ Adapters for threaded connection for plastic hose included.

Installation Options For the Aprilaire 1820 Dehumidifiers

APPLICATIONS Freestanding • Air is pulled into the dehumidifier directly from the space, dehumidified and returned to the space. Inlet and Outlet ducted • Ducted with 8" flex duct or hard pipe • Helps circulate air to equalize humidity and temperature in the space

Optional Wall-Mount Controls



Model 8620/8620W with IAQ Control

- Universal 2H/2C or 4H/2C HP
- Event-Based™ Air Cleaning
- Humidity or Ventilation
- Wi-Fi touch screen (8620W)



Model 8910/8910W with IAQ Control

- Universal 3H/3C or 4H/2C HP
- Event-Based™ Air Cleaning
- Humidity and Ventilation
- 2 Part 3-Wire design
- Wi-Fi touch screen (8910W)



Model 8920W with IAQ Control

- Universal 3H/3C or 4H/2C HP
- Event-Based™ Air Cleaning
- Humidity and Ventilation
- 2 Part 3-Wire design
- Full color Wi-Fi touch screen





Model 5660 Hanging Kit For 1820 and 1850 Models

18.0" W x 6.9" H x 29.9" D Weight: 13 lbs. | Working Load: 400 lbs.



Model 76 Wall Mount Dehumidifier Control

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

MODEL 76 SPECIFICATIONS				
Electrical	External	Remote		
Input voltage and current	Voltage: 24VAC +/20% Current: 25mA (nominal), 50mA (max.) at 24VAC	Voltage: 35VDC (supplied by dehumidifier control board)		
Output	Dry contact, normally open	Communication (RS485)		
Control	External	Remote		
Control range	40% 80% RH	1 (less dry) - 7 (more dry) 65°F - 40°F dew point		
Accuracy	+/-5% RH	See dehumidifier specifications		
Differential	3% RH			
Low limit	40°F dew point	50°F dry bulb, 40°F dew point min.		
High limit	99°F dry bulb	105°F dry bulb		

