

AprilAire®

Dehumidifier

SUBMITTAL

Model E100

Dehumidifier

Project: _____
 Architect: _____
 Contractor: _____
 Suppliers: _____

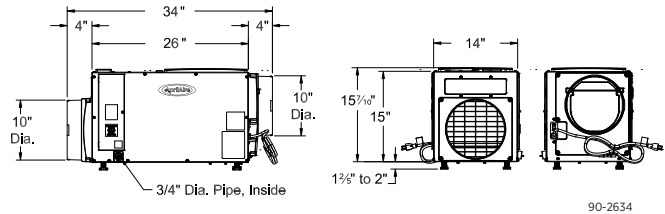
Dealer: _____
 Engineer: _____
 Location: _____
 Date: _____

SPECIFICATIONS		
Capacity⁽¹⁾	@ 80°F/60% RH @ 73°F/60% RH	100 ppd 85 ppd
Energy Factor⁽¹⁾	@ 80°F/60% RH @ 73°F/60% RH	2.6 L/kW-h 2.35 L/kW-h
Airflow @ varying E.S.P. (external static pressure - dry coil)	0.0" w.c. 0.2" w.c. 0.4" w.c.	280 CFM 245 CFM 210 CFM
Voltage, phase, frequency	120 VAC, 1 Phase, 60Hz	
Current draw⁽¹⁾	6.9 Amps	
Noise	55 dBA ducted	
Dimensions (cabinet only)⁽²⁾	Width: 14" Height: 15" Length: 26"	
Unit Weight	64 lbs.	
Shipping Weight	82 lbs.	
Leveling Feet	E100/E100H Only	
Casters	E100C Only	
Control⁽³⁾	Built-in digital control with display	
Control mounting option	Field-interchangeable from top to front	
Cabinet insulation	1/2" EPS	
Air discharge	Top or end	
Inlet/Outlet duct collars	10" dia.	
Backdraft damper at outlet	Included	
Filter	Washable MERV 8 (Part Number 5881)	
Refrigerant	R410A	
Coil type	Corrosion-resistant aluminum	
8' Power cord⁽⁴⁾	Plug type (E100, E100C only)	
Hardwire option	Yes (E100H only)	
Discharge air temperature rise	10°F-30°F	
Drain connection⁽⁵⁾	3/4" MNPT Threaded	
Included drain tubing	10' length (E100C only)	
Warranty	5 Years	

⁽¹⁾Rated capacity, energy factor and current draw measured 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.
⁽³⁾Built-in automatic control capable to be set up for dehumidification and ventilation or zoning.
⁽⁴⁾Model E100H is a hardwired unit and doesn't ship with a power cord.
⁽⁵⁾Threaded barbed fitting included.



MODELS:
E100: Includes 8' power cord
E100C: Uses casters instead of leveling feet
E100H: Terminal connection for hardwiring



OPERATION

The AprilAire E100 Dehumidifiers are designed to dehumidify the air coming into the unit by passing the incoming air over an evaporator coil, dropping the air temperature below the dew point. The moisture is removed from the air and drains out of the dehumidifier to a common floor or waste drain. The air is then reheated in the condenser coil and exits the unit.

Dehumidification occurs until the relative humidity (%RH) setting is reached. The unit then shuts off until periodic sampling determines the need for dehumidification. The integrated digital display and control monitors the %RH during sampling of the incoming room or HVAC return air.

APPLICATION

AprilAire E100 Dehumidifiers are the perfect product for whole-home dehumidification, basements, crawl spaces and sealed attics.

VENTILATION

All E100 models have the ability to bring in fresh, outdoor air into the living space. Fresh air will dilute stale air and pollutants and will reduce humidity in the winter months. If the humidity level of the outdoor air higher than the %RH setting, the dehumidifier will begin dehumidification to reduce the humidity in the home to set humidity level. The outdoor fresh air is brought in through 6" round duct with a 6" round, normally closed damper. This complies with ASHRAE 62.2, Energy Star, and International Residential Code (IRC).

The dehumidifier has built-in controls to adjust the amount of fresh air that is brought in to the home. If wired to the HVAC system, the dehumidifier will bring in the outdoor air when the HVAC system calls for heating, cooling, or is running continuous fan. If the amount of set ventilation time has not been met during the HVAC calls, the dehumidifier will open the ventilation damper and turn on the HVAC fan and bring in fresh air until the ventilation time has been met.

High and low temperature limits are available in 3 different modes, preventing outdoor air that is too hot or too cold from being delivered to the home. If the outdoor temperature rises above the high limit or drops below the low limit, ventilation will not occur. If the outdoor temperature drops below the heat only limit, ventilation will be allowed only when the HVAC system is calling for heat. A high indoor %RH limit is also available in all three ventilation modes.

ZONED DEHUMIDIFICATION

The E100 Dehumidifiers are capable of zoned dehumidification. In this application, the dehumidifier can control the humidity in two separate zones in the home, a Primary and Secondary Zone.

The submittal is intended to show general, overall product dimensions and provide guidance for installation clearance. Drawings are not to scale. Ensure submittals are current. AprilAire reserves the right to make product changes without notification or obligation.



5-year warranty on all installed products
 (warranty does not apply to filters)

Designed & Assembled in the USA
 Utilizing U.S. and Global Components