

AprilAire®

Dehumidifier

FEATURES

- Built-in automatic digital control with top or front mounting options. Can be set up for dehumidification and ventilation or zoning.
- 40' crawlspace alert cable with LED light
- ½" EPS cabinet insulation
- Top or end air discharge orientation
- Washable MERV 8 filter (part number 5881) and 10" diameter inlet/outlet duct collars
- R410A refrigerant
- Corrosion-resistant aluminum coils
- 8' power cord (plug type); field-configurable hardwire option is available
- 10°F–30°F discharge air temperature rise
- ¾" MNPT Threaded drain connection with threaded barbed fitting included
- 10' drain tubing
- 5-year warranty

SPECIFICATIONS

Capacity	@ 80°F/60% RH @ 73°F/60% RH	100 ppd 85 ppd
Energy Factor kW-h	@ 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, 60 Hz	
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.	
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⁾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.

SPECIFICATION

Model E100CS

Crawl Space Dehumidifier



PRINCIPLE OF OPERATION

The Aprilaire E100CS Crawl Space 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. 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.

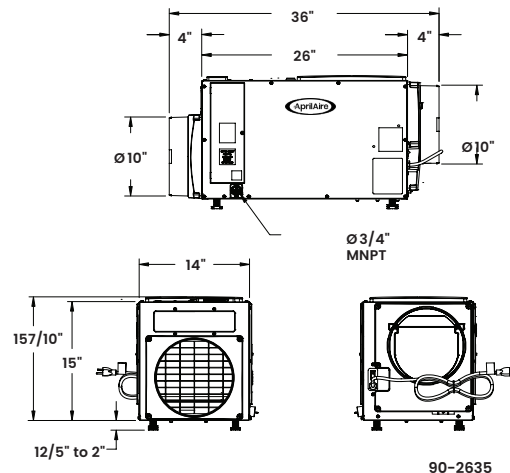
APPLICATION

The Model E100CS controls to a "Dew Point" set point which is ideal for unconditioned spaces. It removes up to 100 pints per day with a low current draw—keeping crawl spaces dry without unwanted increases to the utility bill.

This unit also includes a crawl space alert which is an LED installed in the living space that ensures homeowners their Model E100CS is functioning properly. The light turns on to notify homeowners that the unit is in need of service.

CIRCULATION

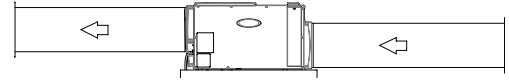
The Model E100CS can be programmed to circulate the air within a crawl space. This evens out relative humidity levels and temperature in the space, eliminating variations in the environment.



INSTALL APPLICATION

Inlet and Outlet Ducted

- Dehumidifier is ducted using 10" duct round flexible or hard duct.
- Air is pulled into the dehumidifier directly from the crawl space, dehumidified and returned back to the crawl space.
- Adding ductwork can help circulate the air around the crawl space.



INCLUDED ACCESSORY



Model 5427 Crawl Space Alert

- 40' cable with LED
- LED illuminates when the dehumidification set point can't be reached or when service is required
- Provides customer peace of mind knowing the dehumidifier is functioning properly

OPTIONAL WALL-MOUNT CONTROL



Model 76 Dehumidifier Control

- On, Off buttons
- Wall-mounted living space control
- As an "External Control" it displays RH and controls to an RH value for basements
- As a "Remote Control" it displays RH and controls to dew point for crawl spaces

OPTIONAL ACCESSORIES



Model 4856 Condensate Pump

- 22 ft. lift
- Low profile
- 120 V



Model 5822 Hanging Kit

- Weight: 3 lbs.
- Supports up to 200 lbs.

MODEL 76 SPECIFICATIONS

ELECTRICAL	EXTERNAL	REMOTE
Input voltage and current	Voltage: 24 VAC +/-20% Current: 25mA (nominal), 50mA (max.) at 24 VAC	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

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AprilAire reserves the right to change specifications without notice.