

Crawl Space Dehumidifier

Model E100CS | Specification Sheet

| SPECIFICATIONS | | | | |
|---|----------------------|---------------------------------------|--|--|
| Capacity | | | | |
| | @ 80°F/60% RH | 100 ppd | | |
| | @ 73°F/60% RH | 85 ppd | | |
| Energy Factor | | | | |
| | @ 80°F/60% RH | 2.6 L/kW-h | | |
| | @ 73°F/60% RH | 2.35 L/kW-h | | |
| Airflow @ varying E.S.P. (external static pressure - dry coil) | | | | |
| | 0.0" w.c. | 280 CFM | | |
| | 0.2" w.c. | 245 CFM | | |
| | 0.4" w.c. | 210 CFM | | |
| Voltage, phase, | frequency | 120VAC, 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 Shipping Weigh | t | 64 lbs. 82 lbs. | | |
| Inlet air operatir | ng conditions during | | | |
| -Dehumidificat | ion: | 50°F-104°F, 40°F dew point min. | | |
| -Ventilation: | | 40°F-140°F, 0%-99% RH | | |

| ¹¹ Rated capacity, energy factor, and current draw measured at 80°F/60% RH inlet air at 0.0 ES | ŝΡ. |
|---|-----|
| (2) Height does not include adjustable feet. The width excludes the filter doors and length | |
| excludes the duct collars. | |
| | |

(non-condensing)

| FEATURES | | | | |
|--|---|--|--|--|
| Control ⁽³⁾ | Built-in digital control with top or front mounting options | | | |
| Crawl space alert | 40' Cable with LED light | | | |
| Cabinet insulation | ½" EPS | | | |
| Air discharge orientation | Top or end | | | |
| Inlet/Outlet duct collars | 10" dia. | | | |
| Backdraft damper at outlet | Not included | | | |
| Filter | Washable MERV 8 (Part Number 5881) | | | |
| Refrigerant | R410A | | | |
| Coil type | Corrosion-resistant aluminum | | | |
| 8' Power cord | Plug type | | | |
| Hardwire option | Yes, field-configurable | | | |
| Discharge air temperature rise | 10°F-30°F | | | |
| Drain connection ⁽⁴⁾ | 3/4" MNPT Threaded | | | |
| Included drain tubing | 10' length | | | |
| Warranty | 5 Years | | | |
| (3) Duilt in automatic control canable to be set | for debracidification and contilation or social | | | |

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

⁽⁴⁾Threaded barbed fitting included.













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.

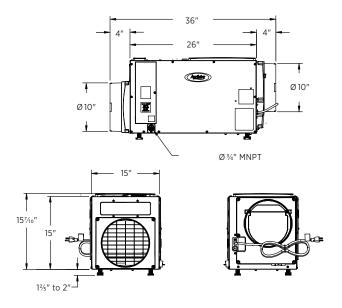
APPLICATION

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

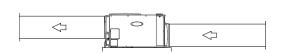
The Model E100CS can be programmed to circulate the air within a crawl space. This evens out relative humidity levels and temperature in the space, eliminating variations in the environment.



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 reaches or when service is required
- Provides customer peace of mind knowing the dehumidifier is functioning properly

Optional Control



Model 76 **Dehumidifier Control**

- On, Off buttons
- Wall-mounted living space control
- As a "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



AprilairePartners.com

Model 5822 Hanging Kit

Weight: 3 lbs.

Supports up to 200 lbs.

| 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 | | |



