

# **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 <sup>(1)</sup>		6.9 Amps		
Noise		55 dBA ducted		
Dimensions:		Width 14"		
(cabinet only)(2)		Height 15"		
		Length 26"		
Unit Weight		64 lbs.		
Shipping Weigh		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		

(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

(non-condensing)

FEATURES		
Control <sup>(3)</sup>	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 <sup>(4)</sup>	3/4" MNPT Threaded	
Included drain tubing	10' length	
Warranty	5 Years	
(7)P : 11 :		

 $<sup>^{(3)}</sup>$ Built-in automatic control capable to be set up for dehumidification and ventilation or zoning.

<sup>(4)</sup>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.

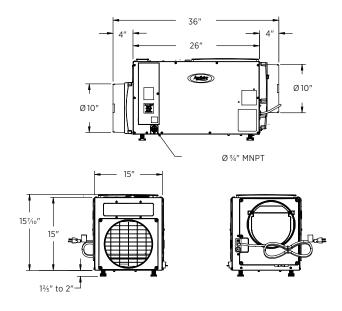
### APPLICATION

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

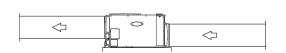
The Model E100CS can be programmed to circulate the air within a crawl space. This evens out relative humidity levels and temperature in the space, eliminating variations in the environment.



## **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



#### 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	



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