

PRODUCT SPECIFICATIONS		
Model	1870 / 1870W (ducted)	1870F (freestanding)
Capacity <sup>(1)</sup>	130 ppd	
Energy Factor <sup>(1)</sup>	2.9 L/kW-h	
Airflow @ varying E.S.P. (external static pressure - dry coil)		
0.0" w.c.	310 CFM	310 CFM
0.2" w.c.	267 CFM	
0.4" w.c.	226 CFM	
0.6" w.c.	178 CFM	
Voltage, phase, frequency	120VAC, 1, 60 Hz	
Current draw <sup>(1)</sup>	8.3 Amps	
Noise	50 dBA ducted	59 dBA
Dimensions: (cabinet only) <sup>(2)</sup>	Width	19.5"
	Height	18.75"
	Length	30"
Weight	113 lbs	114 lbs
Inlet air operating conditions		
Dehumidification:	50°F – 104°F, 40°F dew point min.	
Ventilation:	40°F – 140°F, 0% – 99%RH (non-condensing)	

<sup>(1)</sup> 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.

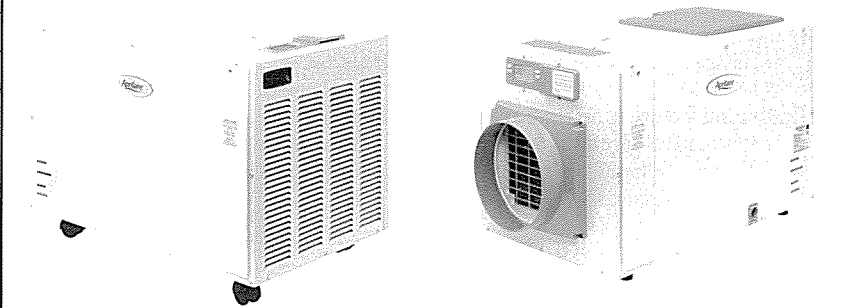
<sup>(2)</sup> Height does not include adjustable feet. The width excludes the filter doors and length excludes the duct collars.

PRODUCT FEATURES		
Model	1870/1870W (ducted)	1870F (freestanding)
Controls <sup>(3)</sup>	Built-in digital control with display	
Control mounting option	Field interchangeable from top to front	Top only
Cabinet insulation	1/2" EPS	
Air discharge orientation	Top or end	End
Inlet/Outlet duct collars	10" dia.	N/A
Backdraft damper at outlet	Included	N/A
Filter	Washable MERV 8	
Refrigerant	R410A	
Coil corrosionresistance	E-Coated coil	
8' Power cord <sup>(4)</sup>	1870 Plug Type/ 1870W Hard wired	Plug Type
Discharge air temperature rise	10°F-30°F	
Drain connection <sup>(5)</sup>	3/4" PVC adapters	
Warranty	5 Years	

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

<sup>(4)</sup> Model 1870W is a hardwired unit and doesn't ship with a power cord. The Model 1870W has a 4 week lead time.

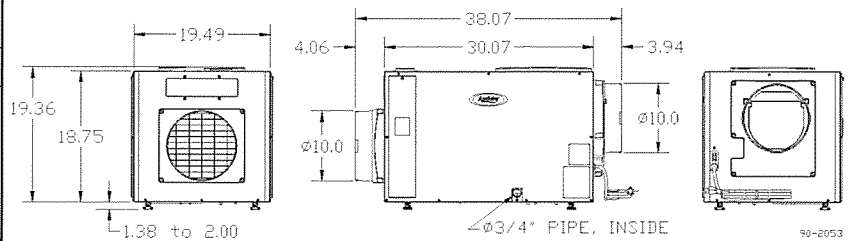
<sup>(5)</sup> Adapters for threaded connection or plastic base included. 1870F includes 5' of clear drain tubing.



Model 1870F



Model 1870



### PRINCIPLE OF OPERATION

The Aprilaire Model 1870 Series 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 1870 series dehumidifiers are the perfect product for whole-home dehumidification, basements and sealed attics.

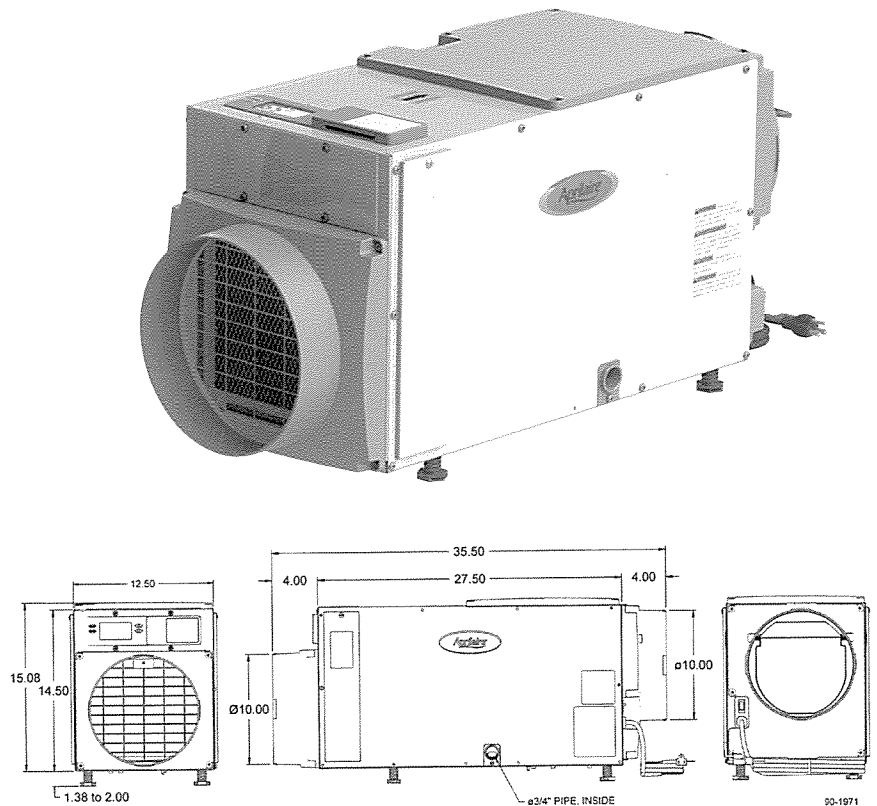
### VENTILATION

The Model 1870 and 1870W have the ability to bring in fresh air. Fresh air will dilute stale air and pollutants and will reduce humidity in the winter months. The fresh air is brought in through a 6" round duct and 6" round normally closed damper. The dehumidifier has built in controls to adjust the amount of fresh air that is brought in.

PRODUCT SPECIFICATIONS	
Capacity <sup>(1)</sup>	95 ppd
Energy factor <sup>(1)</sup>	2.2 L/kW-h
Airflow @ varying E.S.P. (external static pressure - dry coil)	
0.0" w.c.	265 CFM
0.2" w.c.	230 CFM
0.4" w.c.	200 CFM
Voltage, phase, frequency	120VAC, 1, 60 Hz
Current draw <sup>(1)</sup>	8.0 Amps
Noise	54 dBA ducted
Dimensions (cabinet only) <sup>(2)</sup>	Width: 12.5" Height: 14.5" Length: 27.5"
Weight	70 lbs
Inlet air operating conditions	Dehumidification: 50°F – 104°F, 40°F dew point min.  Ventilation: 40°F – 140°F, 0% – 99%RH (non-condensing)

<sup>(1)</sup> 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.

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



PRODUCT FEATURES	
Controls <sup>(3)</sup>	Built-in digital control with top or front mounting options
Crawl space alert (1850CS only)	40' Cable with LED light
Cabinet insulation	1/2" EPS
Air discharge orientation	Top or end
Inlet/Outlet duct collars	10" dia.
Backdraft damper at outlet	Included (1850 only)
Filter	1/2" washable, MERV 8
Refrigerant	R410A
Coil corrosion resistance	E-Coated coil
Power cord	Plug type
Hardwire option	Yes, field configurable
Discharge air temperature rise	10°F-30°F
Drain connection <sup>(4)</sup>	3/4" PVC adapters
Warranty	5 Years

<sup>(3)</sup> The Model 1850 controls to an "RH" set point. The Model 1850CS controls to a "Dew Point" set point which is ideal for unconditioned spaces. Model 1850 ships with the control located on the top of the unit and the 1850CS ships with the control located on the front.

<sup>(4)</sup> Adapters for threaded connection or plastic hose included. Model 1850CS includes 10' of drain tubing.

The 1850 provides superior efficiency and capacity to protect your furnishings and eliminate musty smells in the basement. Removing excess moisture prevents the growth of damaging and unhealthy mold and mildew as well. The 1850 can also be ducted or freestanding, making it the perfect solution for a finished or unfinished basement.

The 1850CS is a high-efficiency dehumidifier designed specifically for the crawlspace. It removes up to 95 pints per day with a low current draw – keeping crawlspaces dry without unwanted increases to the utility bill.

Two other notable features on the 1850CS, are the "crawl space alert" and the use of dew point control. The "crawl space alert" is a blinking LED visible to homeowners from above ground, providing peace of mind that the 1850CS is functioning properly. Consumers will not have to enter the crawlspace to confirm whether or not their units are operating. If the light is on, they know to call for service.

PRODUCT SPECIFICATIONS	
Capacity <sup>(1)</sup>	70 ppd
Energy factor <sup>(1)</sup>	1.91 L/kW-h
Airflow @ varying E.S.P. (external static pressure - dry coil)	
0.0" w.c.	160 CFM
0.2" w.c.	120 CFM
0.4" w.c.	70 CFM
Voltage, phase, frequency	120VAC, 1, 60 Hz
Current draw <sup>(1)</sup>	6.3 Amps
Noise	47 dBA ducted 51 dBA unducted
Dimensions (cabinet only) <sup>(2)</sup>	Width: 12.5" Height: 14.5" Length: 25"
Weight	67 lbs
Inlet air operating conditions	Dehumidification: 50°F – 104°F, 40°F dew point min. Ventilation: 40°F – 140°F, 0% – 99%RH (non-condensing)

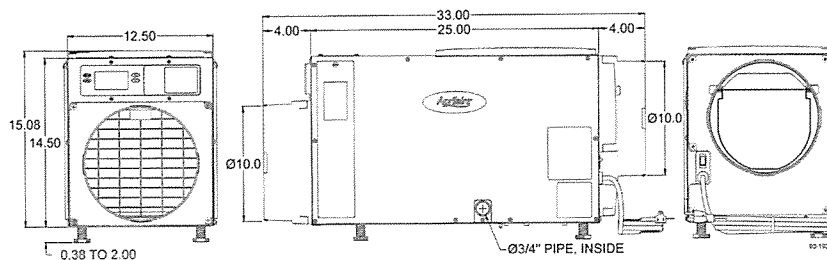
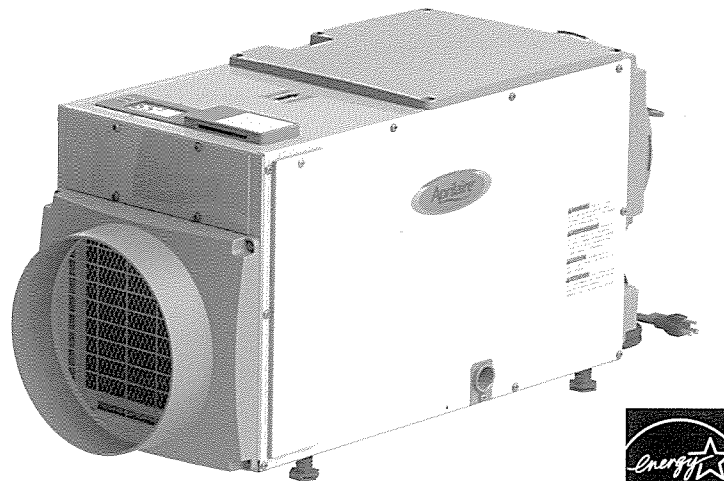
<sup>(1)</sup> Rated capacity and energy factor test done and current draw measured in accordance with AHAM DH-1 2008 at 80°F/60%RH inlet air at 0.0 ESP.

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

PRODUCT FEATURES	
Controls <sup>(3)</sup>	Built-in digital control with top or front mounting options
Crawl space alert (1830CS only)	40' Cable with LED light
Cabinet insulation	1/2" EPS
Air discharge orientation	Top or end
Inlet/Outlet duct collars	10" dia.
Backdraft damper at outlet	Included (1830 only)
Filter	1/2" washable, MERV 8
Refrigerant	R410A
Coil corrosion resistance	E-Coated coil
Power cord	Plug type
Hardwire option	Yes, field configurable
Discharge air temperature rise	10°F-30°F
Drain connection <sup>(4)</sup>	3/4" PVC adapters
Warranty	5 Years
Energy Star qualified	Yes

<sup>(3)</sup> The Model 1830 controls to an "RH" set point. The Model 1830CS controls to a "Dew Point" set point which is ideal for unconditioned spaces. Model 1830 ships with the control located on the top of the unit and the 1830CS ships with the control located on the front.

<sup>(4)</sup> Adapters for threaded connection or plastic hose included. Model 1830CS includes 10' of drain tubing.



The 1830 provides superior efficiency and capacity to protect your furnishings and eliminate musty smells in the basement. Removing excess moisture prevents the growth of damaging and unhealthy mold and mildew as well. The 1830 can also be ducted or freestanding, making it the perfect solution for a finished or unfinished basement.

The 1830CS is a high-efficiency dehumidifier designed specifically for the crawlspace. It removes up to 70 pints per day with a low current draw – keeping crawlspaces dry without unwanted increases to the utility bill.

Two other notable features on the 1830CS, are the "crawlspace alert" and the use of dew point control. The "crawlspace alert" is a blinking LED visible to homeowners from above ground, providing peace of mind that the 1830CS is functioning properly. Consumers will not have to enter the crawlspace to confirm whether or not their units are operating. If the light is on, they know to call for service.