## SPECIFICATION SHEET
### DEHUMIDIFIER
#### MODEL 1830

### PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity(training)</td>
<td>70 ppd</td>
</tr>
<tr>
<td>Energy factor(training)</td>
<td>1.91 L/kW-h</td>
</tr>
<tr>
<td>Airflow @ varying E.S.P.</td>
<td></td>
</tr>
<tr>
<td>(external static pressure - dry coil)</td>
<td></td>
</tr>
<tr>
<td>0.0&quot; w.c.</td>
<td>160 CFM</td>
</tr>
<tr>
<td>0.2&quot; w.c.</td>
<td>120 CFM</td>
</tr>
<tr>
<td>0.4&quot; w.c.</td>
<td>70 CFM</td>
</tr>
<tr>
<td>Voltage, Phase, Frequency</td>
<td>120V, 1, 60 Hz</td>
</tr>
<tr>
<td>Current draw(training)</td>
<td>6.3 A</td>
</tr>
<tr>
<td>Noise</td>
<td>47 dBA ducted 51 dBA unducted</td>
</tr>
<tr>
<td>Dimensions (cabinet)</td>
<td>Width: 12.5&quot; cabinet</td>
</tr>
<tr>
<td></td>
<td>Height: 14.5&quot; cabinet</td>
</tr>
<tr>
<td></td>
<td>Length: 25&quot; cabinet</td>
</tr>
<tr>
<td>Weight</td>
<td>67 lbs</td>
</tr>
<tr>
<td>Operating conditions</td>
<td></td>
</tr>
<tr>
<td>Inlet air operating conditions</td>
<td>50°F - 104°F, 40°F dew point min.</td>
</tr>
<tr>
<td>Ambient/Ventilation</td>
<td>40°F - 140°F, 0% - 99% RH</td>
</tr>
</tbody>
</table>

(1) Rated Capacity, Energy Factor and Current Draw measured in accordance with AHAM DH-1 2008 at 80 F/60% RH inlet air at 0.0 ESP

### PRINCIPLE OF OPERATION

The Aprilaire Model 1830 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 1830 is the perfect product for smaller homes, townhomes, condominiums and crawlspaces.

### VENTILATION

The Model 1830 has 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 FEATURES

- Controls: Built-in digital control with display, top or front mount
- Cabinet insulation: 1/2” EPS
- Air discharge orientation: Top or end
- Inlet/Outlet duct collars: 10” dia.
- Backdraft damper at outlet: Included
- 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: 3/4” PVC adapters(2)
- Warranty: 5 Years
- Energy Star qualified: Yes

(1) Built-in automatic control capable to be set up for dehumidification, humidification, and ventilation or zoning.
(2) Adapters for threaded connection or plastic hose included.
Installation options for the Aprilaire 1830 Dehumidifier

Shown in horizontal applications, can be installed in vertical applications as well.

**APPLICATIONS**

**Main Return to Main Return - RECOMMENDED**
- This application can be used when a supply duct is not available
- Air is pulled from the return duct, dehumidified, and returned to the return duct
- Assures that the dehumidified air is mixed with rest of the air in the duct before it re-enters the house
- This application is used in basements, attics, crawl spaces, etc.

**Dedicated Return to Main Supply or Dedicated Return to A/C Return**
- This application can be used when a return or supply duct is not available
- Air is pulled through a dedicated return grille, dehumidified, and returned to the supply plenum or return

**Dedicated A/C Return to A/C Return**
- For homes without duct work
- Dries a specific area that has a moisture issue
- Dehumidifier can be located in a closet, mechanical room or unfinished area and ducted into a finished room

**Main Return to Main Supply**
- Air is pulled from the return duct, dehumidified, and returned to the supply plenum
- This application is used in basements, attics, equipment closets, etc.

**Unducted - freestanding**
- Model 1830 unducted
- Air is pulled into the dehumidifier directly from the space, dehumidified, and return back to the space
- This application is used in basements, crawlspaces, etc.
- HVAC closet vertical discharge

**Optional Wall Mount Controls:**

**Model 76 Dehumidifier Control**
- On/Off buttons
- Wall mounted living space control
- Displays RH and controls to an RH value
- Remote control for crawlspace applications and sealed attics

**Model 8620 Universal Programmable Thermostat**
- Large touch screen display
- 2H/2C conventional or 4H/2C heat pump
- Outdoor temperature sensor included
- Designed to meet ASHRAE 62.2 ventilation guidelines
- Notifies when ventilation is active
- Built in RH sensor
- Capable to control either humidification, dehumidification or ventilation and air cleaning

**8910 Module Universal Programmable Thermostat**
- Large touch screen display
- 2H/2C conventional or 4H/2C heat pump
- Two part control — 3 wire design
- Notifies when ventilation is active
- Built in RH sensor
- Outdoor temperature sensor included
- Design to meet ASHRAE 62.2 ventilation guidelines
- Optional high or low outdoor temperature lockout
- Capable to control humidification, dehumidification, ventilation and air cleaning