

# Industrial Grade Dehumidifier Model 1873V3 | Specification Sheet

SPECIFICATIONS				
Capacity		300 ppd		
Energy Factor		2.5 L/kW-h		
Airflow @ 0.6" w.c. (external static pressure - dry coil)		500 CFM		
Electrical Data				
Voltage, Phase, Frequency		277VAC, 1 phase, 60 Hz		
Operating Amps <sup>(1)</sup>		9.5 Amps		
Power (Watts)(1)		2270		
Min. Circuit Ampacity <sup>(2)</sup>		15A		
Max. Overcurrent Protection(3)		25A		
Dimensions:	Width	28½"		
(cabinet only)	Height	19"		
	Length	23"		
Weight		145 lbs		
Ventilation		Input available		

<sup>&</sup>lt;sup>©</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>©</sup>Use when selecting wire size and type. <sup>©</sup>Use when sizing the breaker or fuse.

FEATURES			
Control	Model 76 included		
Air Supply Orientation	In-line, top, bottom, side, any combination		
Supply Dimensions	6" x 15" (Qty 4)		
Inlet Dimensions	14" x 14"		
Filter	MERV 11 disposable		
Refrigerant	R410A		
Coil Type	E-coated		
Hardwire	Yes		
Drain Connection*	3/4" NPT female bottom connection		
Leveling Feet	Included		
Hanging Brackets for Threaded Rod	Included		
Warranty	5 Years		

<sup>\*</sup> Requires drain trap



#### PRINCIPLE OF OPERATION

The Aprilaire Model 1873V3 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 to a common floor or waste drain. The air is then reheated in the condenser coil and exits the unit.

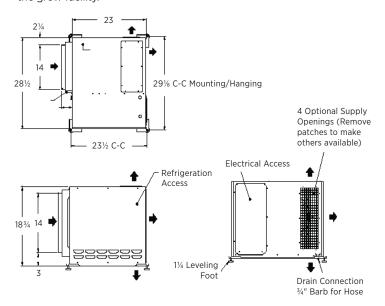
Dehumidification occurs until the set point is reached, then shuts off until the control determines a need for operation.

#### APPLICATION

The Aprilaire Model 1873V3 Dehumidifier is the perfect solution for the precise management of humidity required in an indoor growing environment.

#### **CIRCULATION**

The Model 1873V3 can also be programmed to circulate air within a grow facility. Proper air flow carries moisture away from the plants, helping to prevent fungus, disease and plant pests from damaging the crop. Circulating the air also maximizes the application of  $\mathrm{CO}_2$  in the grow facility.



## **Installation Options For the Aprilaire 1873V3 Dehumidifiers**

APPLICATIONS	
<ul> <li>Suspended</li> <li>Air is pulled into the dehumidifier directly from the space, dehumidified and returned to the space.</li> <li>The dehumidifier is hung from the ceiling to save space in the facility.</li> </ul>	
Freestanding  • Air is pulled into the dehumidifier directly from the space, dehumidified and returned to the space.	
<ul> <li>Inlet and Outlet ducted</li> <li>Ducted to circulate air to equalize humidity, temperature and move CO<sub>2</sub></li> <li>Dehumidifier located in adjacent room and ducted to space requiring dehumidification.</li> <li>Great for drying room applications where space may be limited.</li> </ul>	

## **Optional Controls**



#### **Model 8840**

Easy-to-use color touch screen with all control options on the home screen.



#### **Model 8830**

Easy-to-use touch screen with all control options on the home screen.



### **Model 8820**

Easy-to-use touch screen designed for temperature and humidity control.



#### **Model 8082 Sensor**

Monitor temperature and humidity in multiple locations. Readings averaged to balance temperature and humidity.





#### Model 76

Dedicated monitoring and control of each dehumidifier at canopy height.

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		
Differential	3% RH	specifications		
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		





