

Aprilaire helps you make opportunities happen.

And we'll help you take advantage of them. Give your light commercial customers more with Aprilaire indoor air quality products. Call Aprilaire today.

Sales support 1-800-334-6011

- We'll help you sell these applications with sales materials and training that use a problem/solution approach
- All Aprilaire advertising promotes products that are cost effective, high quality, engineered to last and built for reliability

Applications support 1-800-334-6011

- Toll-free technical support to help you with application or installation information
- Experienced technical support staff can walk you through virtually any problem
- Download tech documents at www.aprilairecontractor.com
- Email: techsupport@aprilaire.com

24-hour shipping and local stocking

- See your local Aprilaire wholesaler for pricing and availability

Call today for a wealth of opportunities!

To get more from your customers, offer your customers more.

Indoor air quality solutions that are essential for business.

HVAC Automation (Window®-based)

Save energy while providing a more productive environment for your employees.



Electronic Thermostats

Ultra-thin, easy-to-use digital and programmable controls featuring energy saving accuracy.



Zoned Comfort Control Systems

The most reliable way to achieve comfort and energy savings in every area of your light commercial space.



UV Germicidal Lamps

Germicidal lamps help reduce absenteeism and mold issues and improve system efficiency by keeping coils clean.



Automatic Humidifiers

Help protect inventories and critical processes while providing a healthier, more comfortable environment.



Aprilaire High Efficiency Air Cleaners

Deliver clean, healthy air protecting customers, employees and equipment.



**The easy-to-install—
and profit from—
solution.**



steam

Aprilaire Steam Humidification— Protecting the way your customers do business.

Improper humidity levels threaten many of your customers' businesses.

Whether your customers have valuable inventories or specific processes that require protection, the need for precise humidity control is widespread.

Print and copy shops rely on the appropriate amount of humidity to prevent paper from curling, keeping presses and copiers operating smoothly. Cabinetry and millwork shops rely on the appropriate amount of humidity to prevent the wood they use from cracking, drying and warping.

Virtually all businesses rely on electronics to conduct day-to-day operations. If proper humidity levels are not maintained, static electricity can cause electronics to fail, costing your customers time and money.

Every business strives to increase productivity. Insufficient humidity can cause employees to suffer from respiratory infections and other ailments, leading to general discomfort, increased absenteeism and a less productive workforce.

There are many ways to humidify. Not all are appropriate for light commercial applications.

Most light commercial buildings do not have a boiler to satisfy their humidification needs. Others have no need for large, complicated industrial solutions offered by many manufacturers.

Your customers need a humidification system that is designed with their applications in mind. A system that will provide them the precise humidity control they need to protect their inventories and processes, and perform as good as new after years of service.

You need a system that is designed with the contractor in mind. A system that provides ease of installation and maintenance. A system that reduces service callbacks by maintaining accurate control of your customers' humidity needs.



The total light commercial solution is Aprilaire Steam Humidification.

Through extensive research and over 50 years expertise in humidification control, Aprilaire now offers two dedicated models of Steam Humidifiers designed to meet the needs of you and your customers:

- Model 1150: 12 lb/hr unit featuring an on/off control
- Model 1160: 24 lb/hr unit featuring a modulating output designed to regulate the output of the humidifier based on the humidity need in the building.

Built unlike any other humidifier.

Installation flexibility—A short absorption distance allows installation in tight duct configurations and each Aprilaire Steam Humidifier includes everything you need to complete your job.

Durable and attractive—The stainless steel frame and housing is designed to exceed all application requirements and complement any environment.

Carefree maintenance—The steam reservoir is made of stainless steel with continuously welded seams and boasts a three season "No Maintenance Guarantee" when supplied with water softened by a sodium chloride ion exchange process to a consistent maximum hardness of one grain/gallon.

Long service life—All internal components—such as the low watt density alloy sheathed immersion heaters, contactors, and transformers—are high quality, industry proven parts designed to provide reliability and long life.

No water supply hassles—Aprilaire Steam Humidifiers are compatible with both standard tap and softened water, allowing installation into any application. The amount of water in the humidifier is continuously monitored electronically to ensure top performance.

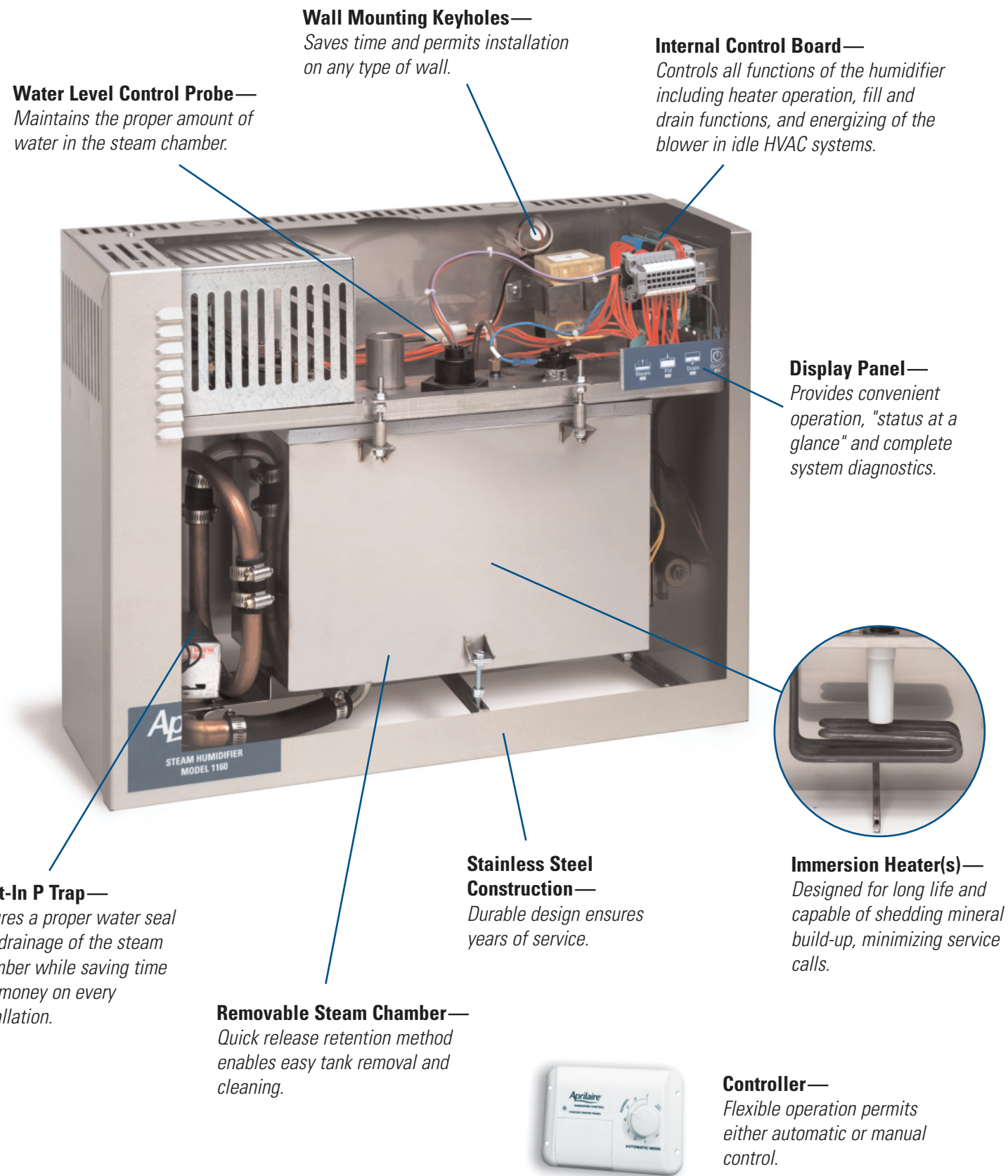
Convenient operation—The display panel provides "status at a glance" and complete system diagnostics.

Flexible controller operation—The controller automatically provides the proper amount of humidity—regardless of outdoor temperature—or can be placed in manual mode, allowing the user to control to a specific set point.

Operates when the HVAC system is active—Aprilaire Steam Humidifiers are designed to deliver humidity into a space when there is a requirement for humidity and airflow in the HVAC system. When a call for humidity exists, the duct mounted air flow switch will ensure that air flow is present and the humidifier will enter standard operation mode and produce steam.

Operates when the HVAC system is idle—Aprilaire Steam Humidifiers are also designed to deliver humidity into a space when there is a requirement for humidity, but the HVAC system is idle. The humidifier will energize the blower to provide the air flow required to satisfy the duct mounted air flow switch air and deliver humidification into the space.

Aprilaire Steam Humidification— Features and Benefits.



Easy to install. Easy to maintain.

Aprilaire Steam Humidifiers are designed to make your installation smooth and easy with the flexibility you need to meet the challenges light commercial applications present.

- Aprilaire Steam Humidifiers include keyholes that allow the units to be installed directly onto a wall. A steam distribution kit is also included, allowing the humidifiers to be mounted up to 10 feet away from the HVAC system. This installation only requires a 1-1/2 in. opening in the duct work.
- Aprilaire Steam Humidifiers feature a built-in p-trap, allowing you to plumb the units with a simple copper or flexible drain line, saving you both time and money.
- Aprilaire Steam Humidifiers require minimal annual maintenance – even less when particular water types and conditions are present. A "drain and flush" cleaning system helps prevent lime and calcium build-up, and an "end of season" drain empties the steam reservoir after 72 hours of idle time.

An Aprilaire Steam Humidification System, not just a humidifier.

The Aprilaire Steam Humidifier is more than just a humidifier – it's a complete steam humidification system in a box – including everything you need to complete your job. Each Aprilaire Steam Humidifier includes:

- Steam Humidifier
- Steam Humidifier Controller
- Air Flow Proving Switch
- Steam Distribution Tube
- 10 ft Flexible Steam Hose



If your job requires the unit to be installed in a hanging configuration or additional safety devices are desired, Aprilaire has a variety of optional accessories that are available through your local distributor to make your installation as simple as possible:

- Duct Mounted High Limit Controller
- Suspension Hanging Brackets

Aprilaire Steam Humidification— Industrial-Grade Specifications.

Guide Specifications for Aprilaire Steam Humidifiers

Product Specifications:

- Construction shall be 304 stainless steel for all housing and other components exposed to water
- Feature an electronic circuit board to control the complete operation of the humidifier including; fill cycles, heater operation, control signal and drain cycles
- On/Off units shall feature a power relay to energize the heaters to reduce the unit noise level
- Modulating units shall feature a contactor to energize the heaters that is tested and rated for increased cycles associated with modulating control
- Production of steam shall be through the use of incoloy alloy sheathed resistive element immersion heating elements located in a stainless steel steam tank that is removable and cleanable and does not require annual replacement
- Include a probe type water level control and safety shut down system to maintain the proper water level within the unit and to disable the unit in event of water levels above or below the optimum levels
- Feature a rapid start-up function which upon a call for humidity turns the humidifier on at 100% output to bring the steam tank to the proper temperature to produce steam. The unit will then shut off, restart and operate based on the corresponding humidistat control signal
- Feature an automatic drain and flush cycle that will periodically drain the tank and flush it with clean water to prevent mineral deposit build-up in the steam tank
- Feature an end of season drain function that will drain the steam tank of water after a 72-hour period in which no calls for humidity take place
- Feature a cool down period to temper the water before draining the steam tank to prevent water hotter than 140°F from being introduced into the building drain
- Feature an integral steam tank p-trap to prevent drain water from backing up into the unit
- Be suitable for use with standard tap or softened water
- Not require more than annual maintenance when supplied with standard tap water
- Feature a 3 season "No Maintenance Guarantee" when supplied with water softened by a sodium chloride ion exchange process to a consistent maximum hardness of 1 grain/gallon

- Include integral wall mounting keyholes located on 16" centers
- Include a duct-mounted stainless steel steam distribution tube complete with steam orifices to prevent "spitting" or water carry-over into the duct during start-up
- Include 10 ft steam hose designed to connect the unit to the steam distribution tube
- Be designed to maintain the minimum humidity absorption distances possible based on humidifier output and duct air conditions

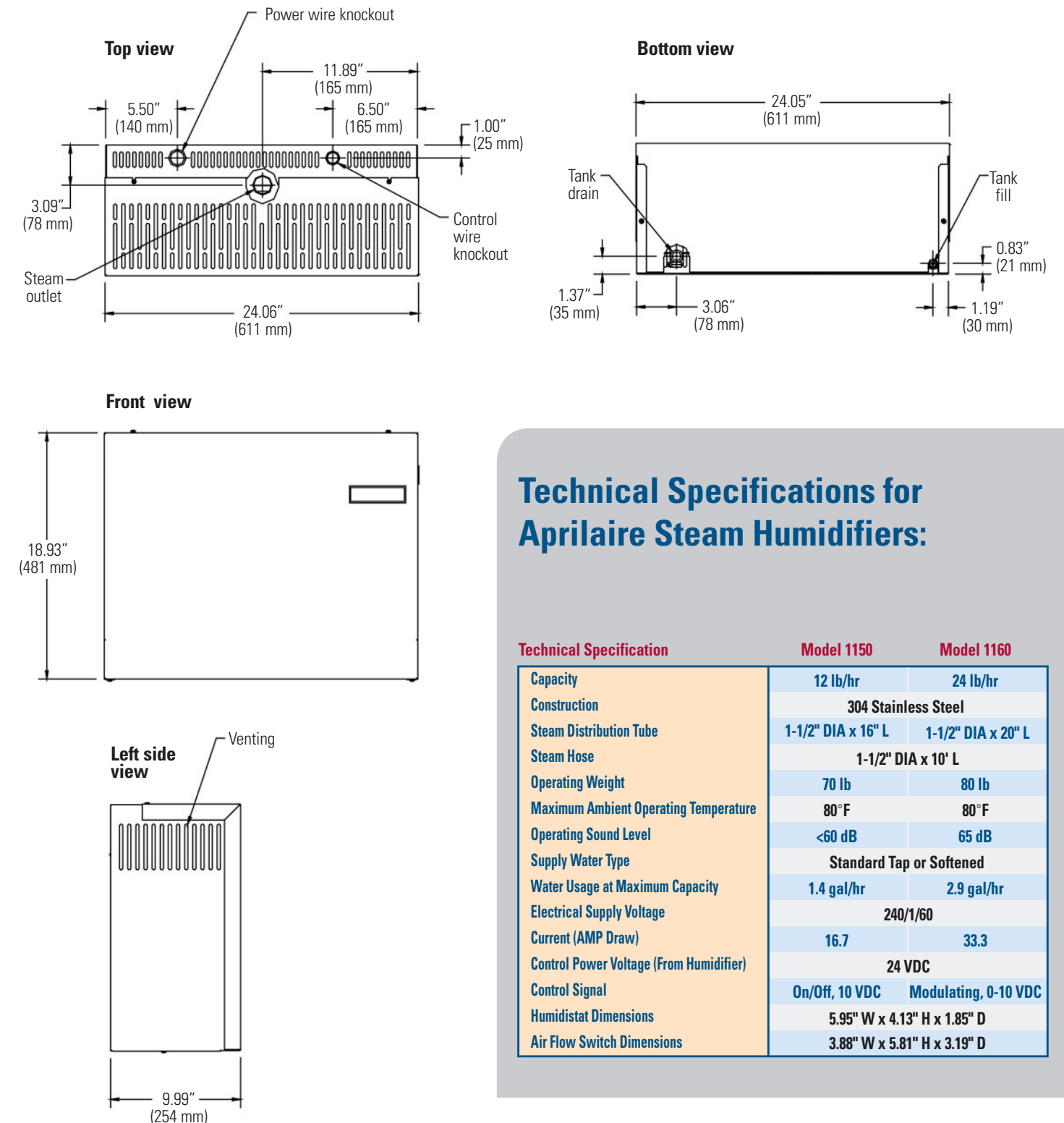
Control Specifications:

- Include an integral user interface complete with unit on/off power switch and operational and diagnostic LEDs
- Feature the ability to energize the HVAC equipment blower when there is a call for humidification and the HVAC equipment is idle
- Feature an operating time monitor to accumulate actual humidifier run-time to activate the automatic drain and flush cycle, end of season drain function and the steam tank cool down period
- Include a return duct mounted humidistat that can be set to maintain a specific RH% set point or be set as a temperature compensating automatic humidity controller that will adjust the indoor relative humidity requirement based on the actual outdoor temperature
- Include an air flow proving switch to ensure the proper airflow before allowing the humidifier to produce steam
- Feature the ability to accept an on/off signal or 1-10 VDC or 4-20mA modulating signal by others for unit control
- Feature an on/off control humidistat for units with 12 lb/hr output that will maintain humidity levels at the humidistat within 5% of set point
- Feature a directly proportional modulating control humidistat for units with 24 lb/hr output that will send a signal ranging from 0 VDC – 10 VDC from the humidistat to the humidifier. When given a 0 VDC signal the humidifier will not produce steam, when given a 5 VDC signal, the humidifier will operate at 50%, and when given a 10 VDC signal, the humidifier will operate at 100% capacity

Aprilaire Steam Humidifiers Shall:

- Model 1150 (12 lb/hr) and Model 1160 (24 lb/hr)

Dimensional Data



Technical Specifications for Aprilaire Steam Humidifiers:

Technical Specification	Model 1150	Model 1160
Capacity	12 lb/hr	24 lb/hr
Construction	304 Stainless Steel	
Steam Distribution Tube	1-1/2" DIA x 16" L	1-1/2" DIA x 20" L
Steam Hose	1-1/2" DIA x 10' L	
Operating Weight	70 lb	80 lb
Maximum Ambient Operating Temperature	80°F	80°F
Operating Sound Level	<60 dB	65 dB
Supply Water Type	Standard Tap or Softened	
Water Usage at Maximum Capacity	1.4 gal/hr	2.9 gal/hr
Electrical Supply Voltage	240/1/60	
Current (AMP Draw)	16.7	33.3
Control Power Voltage (From Humidifier)	24 VDC	
Control Signal	On/Off, 10 VDC	Modulating, 0-10 VDC
Humidistat Dimensions	5.95" W x 4.13" H x 1.85" D	
Air Flow Switch Dimensions	3.88" W x 5.81" H x 3.19" D	