

# APRILAIRE EVAPORATIVE HUMIDIFIER CAPACITIES

WITH 120° AND 140° F. PLENUM TEMPERATURES

## CAPACITY CLAIMS

Some manufacturers' published claims of 19 gallons per day (GPD) or more are based on 140° F. plenum temperatures. Aprilaire publishes capacities using 120° F. which is most feasible and common for all gas/oil furnaces.

Below are Aprilaire capacities (GPD) at both temperatures, however 120° F. is recommended for proper sizing.

	120°F (49°C)	140°F (60°C)	CAPACITIES (sq. ft.)
Model 400 small bypass drainless	17	22	up to 4,000
Model 500 small bypass	12	16	up to 3,000
Model 600 large bypass	17	22	up to 4,000
Model 700 fan powered	18	23	up to 4,200










# A humidification solution for every home.

Your Aprilaire Comfort Advisor will recommend which one is right for you.



## Aprilaire Humidifier Specifications

	A. Unit Size (inches) B. Plenum Opening (inches)	Capacity gpd = gallons per day	Electrical Data
 <p><b>Model 700*/700M**</b> Powered Unit – Built-in fan that pulls heated air directly from the furnace.</p>	A. 15-29/32W x 18H x 10-11/32D B. 14-3/4W x 14-5/16H	18 gpd	120V-60Hz 0.8 AMP
 <p><b>Model 600*/600M**</b> Bypass Unit – Uses the furnace blower to move air through a Water Panel.®</p>	A. 15-3/8W x 15-3/4H x 10-1/4D 6" dia. round opening B. 10W x 12-3/4H	17 gpd	24V-60Hz 0.5 AMP
 <p><b>Model 400*/400M**</b> Bypass Unit – Uses 100% of water and evaporative technology that eliminates the need for a drain.</p> 	A. 15-3/8W x 15-3/4H x 10-1/4D 6" dia. round opening B. 10W x 12-3/4H	17 gpd	24V-60Hz 0.5 AMP
<p><small><b>^NOTE:</b> Heat pumps – Model 400 can be installed in heat pump applications. However, due to the fact that heat pumps deliver lower temperature air to the home than gas furnaces, evaporation will be approximately 60% of rated capacity. (With other Aprilaire models, hot water can be used instead of cold to maximize evaporation. However, due to the nature of the wicking water panel in the Model 400 hot water provides less benefit.) As such, your dealer will need to take the size and age of your home into consideration to ensure the Model 400 will provide satisfactory comfort and protection through adequate humidification.</small></p>			
 <p><b>Model 500*/500M**</b> Bypass Unit – Designed for smaller homes.</p>	A. 15-5/8W x 13H x 10-1/4D 6" dia. round opening B. 9-1/2W x 9-1/2H	12 gpd	24V-60Hz 0.5 AMP
 <p><b>Model 800</b> Steam Humidifier – For applications when evaporative units are less practical (attics, crawl spaces, closets, milder winter climates, non-forced air heating source).</p>	Model 800: A. 10-1/8W x 20-7/8H x 7-1/8D B. N/A	11.5 gpd 16.0 gpd 20.5 gpd	120V-60Hz 11.5 AMP 120V-60Hz 16 AMP 208V-60H 11.5 AMP
 <p><b>Model 865 Ductless</b> Ductless Humidification System – Includes the Model 800, Model 850 Fan Pack, Model 65 Control and Model 4028 Drain Trap.</p>	Fan Pack: A. 14W x 6-7/8H x 5D Finished Grille 17-1/16W x 7-13/16H B. N/A	30.0 gpd 23.3 gpd 34.6 gpd	208V-60H 16 AMP 240V-60Hz 11.5 AMP 240V-60Hz 16 AMP

\* Automatic Digital Control (shown)

\*\* Manual Control For those rare occurrences where an automatic control is not practical, Aprilaire digital control can be installed in manual mode while still delivering the accuracy and information you need for optimum performance.

Warranty – All Aprilaire models are warranted for five (5) years from date of installation for parts.

Heat Pumps – Plumbing the humidifier to hot water is recommended on all heat pump installations or if it is installed to operate independently of a call for heat. (See ^NOTE for Model 400)

Bypass humidifiers can be installed on the supply or return plenum.

• Water usage rate – Models 700, 350, and 360 is 6 gph (gph=gallons per hour); Models 500 and 600 is 3 gph; Model 400 is 0.7 gph; Model 800 is 0.6 to 1.8 gph depending on voltage, amp draw and water quality.

### Humidifier Sizing Chart (8' Ceilings)

Structure Tightness	1000 ft <sup>2</sup>	1500 ft <sup>2</sup>	2000 ft <sup>2</sup>	2500 ft <sup>2</sup>	3000 ft <sup>2</sup>	4000 ft <sup>2</sup>	5000 ft <sup>2</sup>
<b>Humidity needed (GPD per AHRI)*** Guideline F</b>							
<b>Tight</b>	4.3	6.4	8.5	10.6	12.7	17	21.2
<b>Average</b>	8.6	12.8	17	21.3	25.4	34	42.6
<b>Loose</b>	12.7	19.1	25.5	31.8	38.1	51	63.6

\*\*\* AHRI Air Conditioning, Heating, and Refrigeration Institute GPD = Gallons Per Day Guideline F

• A family of 4 will add 2 gallons of humidity per day through everyday activities like breathing, cooking, bathing and washing.  
• Evaporative capacities assume blower is active 100% of the time, plenum temperature is at 120°F and water is cold.



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Form # 293 • 253813  
11.15

<sup>1</sup>See owner's manual for details  
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