Specification Sheet

AprilAire

HydroCore™ Series

720

Fan-Powered Evaporative Humidifier



MODELS:
720A: with Automatic Humidistat
720M: with Manual Humidistat

5 YEAR WARRANTY

DESIGNED & ASSEMBLED IN THE USA
UTILIZING U.S. AND GLOBAL COMPONENTS

21 GPD

Features

- Highest capacity AprilAire evaporative humidifier
- HydroCore™ Technology recirculates water to maximize panel saturation with a 60% reduction in wastewater*
- Reconfigurable fan design allows for increased installation options on vertical or horizontal systems
- Fast and easy installation for every application with +/- 3 degree level tolerance
- Variable speed fan provides low speed option for reduced noise
- One-piece HydroCore™ Water Panel cartridge simplifies annual maintenance
- Best choice for systems with low or variable speed air handlers
- Pulls heat directly from the plenum
- Designed for tightly constructed homes up to 6,250 ft^2 total

*Compared to AprilAire 700 Humidifier

Specifications

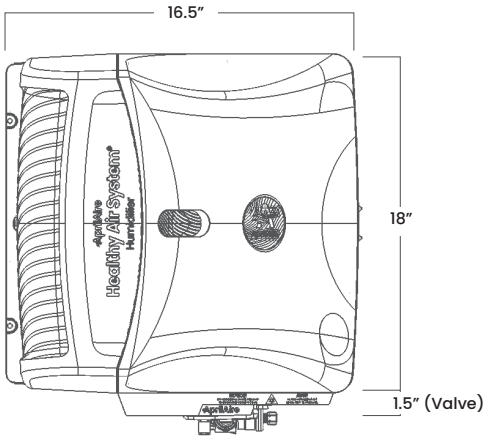
Capacity (Supply Mounted)	High Speed: 21 GPD (0.88 GPH) Low Speed: 19 GPD (0.79 GPH)
Electrical Data	120 VAC - 60Hz - 1.25A 24 VAC - 60Hz - 10VA Required
Required Water Supply	Recommend softened water or installing an inline scale reducing filter
Dimensions	16 ½" W x 18" H x 11" D
Weight	13.75 lbs. (Unit Weight) 16.5 lbs. (Shipping Weight)
Plenum Opening	14 ¼" W x 14 ¼" H
Safety Standards	Listed to UL 998, CAN/CSA-C22.2 No. 104:20 - Humidifiers

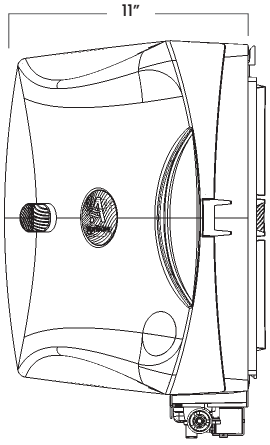
Capacity based on 120ºF plenum and 70ºF water temperature

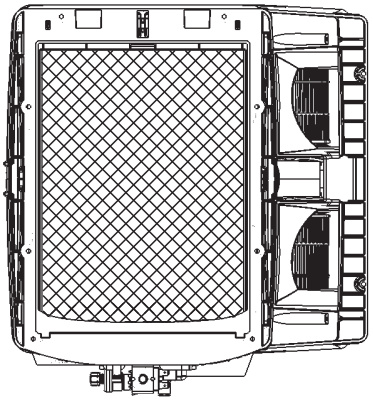
Principle of Operation

The AprilAire 720 Fan-Powered Evaporative Humidifier delivers maximum moisture output with superior water efficiency for ducted HVAC systems. When the humidifier control signals that humidity is low, water and air flow into the HydroCore™ where natural evaporation occurs. Increased output and water conservation are realized with water recirculation technology. The humidifier fan returns humidified air back to the duct where your HVAC system can distribute humidity throughout the home. The 720 Humidifier utilizes water for both evaporation and the removal of solids left behind during the evaporation process. Installing on softened water is recommended. Water may or may not be noticed in the drain line due to the improved efficiency. Once humidity levels are reached, unused water is sent down the drain to prevent standing water from being retained. It is normal to notice a small surge of water in the drain line for this brief event. This is crucial to help flush away trouble-causing mineral deposits and prolong time between service intervals.

HydroCore™ TECHNOLOGY







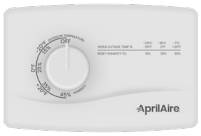
HUMIDIFIER SIZING GUIDELINES GPD NEEDED PER SQUARE FOOT‡ BASED ON BUILDING STRUCTURE TIGHTNESS

STRUCTURE TIGHTNESS	TOTAL TREATED VOLUME OF BUILDING (FT^3)								
	8000	12000	16000	20000	24000	32000	40000	48000	56000
	TOTAL TREATED BUILDING FLOOR AREA (FT^2) WITH 8 FT CEILINGS								
	1000 Ft^2	1500 Ft^2	2000 Ft^2	2500 Ft^2	3000 Ft^2	4000 Ft^2	5000 Ft^2	6000 Ft^2	7000 Ft^2
Tight	3.3 GPD	5.0 GPD	6.7 GPD	8.3 GPD	10.0 GPD	13.4 GPD	16.7 GPD	20.1 GPD	23.4 GPD
Average	6.7 GPD	10.0 GPD	13.4 GPD	16.7 GPD	20.0 GPD	26.7 GPD	33.4 GPD	40.1 GPD	46.7 GPD
Loose	10.0 GPD	15.0 GPD	20.0 GPD	25.0 GPD	30.1 GPD	40.1 GPD	50.1 GPD	60.1 GPD	70.2 GPD

‡**GPD = Gallons Per Day, as recommended by AHRI (Air Conditioning, Heating and Refrigeration Institute), 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.

Included Control





Model 60 (720A) Automatic Humidistat

- RH adjustment knob
- Backlit LCD displays RH & setting when adjusting
- Change water panel and service needed indicator lights
- Blower Activation mode can extend humidifier run time
- Outdoor temperature sensing for automatic set back of humidity to reduce window condensation
- Manual or automatic operation (Return duct mounted)

Model 4655 (720M) Manual Humidistat

- RH adjustment knob
- Duct or wall mounting options for easy access
- Humidity guide lets the user pre-adjust RH based on expected outdoor temperature changes
- Simple wiring

	Model 60	Model 4655
Dimensions (W" x H" x D")	6 x 4 1/4 x 1 1/2	5 1/8 x 3 3/8 x 1 15/16
AC Power	24 VAC (18-30 VAC) at 60 HZ	N/A
Power Consumption	0.08A @ 24 VAC	N/A
RH Setting Range	10%-45%, Off (45%: max humidity)	15%-45%, Off (45%: max humidity)
Humidity (RH)	Control Accuracy: ±3% Control Range: 0% to 45% Differential: 3%	Control Accuracy: ±5% Control Range: 0% to 45% Differential: 5%
Control Options	System Setting: Auto or Manual Blower Activation: Off or On	N/A

Annual Operation & Maintenance

Fall Startup:
- Turn humidistat to desired set point
- Confirm water supply is on

Spring Shutdown:
- Turn humidistat to OFF*

*Digital humidifier control in automatic mode, no adjustment necessary

Once Per Season:
- Remove cover and HydroCore™; replace with a genuine AprilAire L HydroCore™ Water Panel cartridge
- Brush away any scale buildup in the base or valve cup
- Inspect drain line and clear any buildup or blockages
- Inspect orifice; remove and replace if there is buildup or blockages (included with HYDRLH Kit)
- For hard water installations, remove and replace the orifice every season

Model No.	Includes	Works With
HYDROL	HydroCore Replacement Cartridge	620 & 720 Humidifiers
HYDRLH (Kit)	HydroCore + Replacement Orifice	

*Includes replacement orifice and seal cap



MODEL L



ORIFICE
(INCLUDED WITH HYDRLH)

Form No. 387 • 327143 • 09.25
© 2025 AprilAire | aprilairepartners.com | 800.334.6011
AprilAire reserves the right to change specifications without notice.