

MODEL 550

Air**Vol**ution^D



Medium to Large Spaces

For medium to large spaces, the AirVolution-D 550 fan is extremely effective at controlling temperature and humidity. Ideal locations include auto shops, gyms, and agricultural applications like dairy farms and equine facilities. The system design eliminates the gearbox for a lighter, leakproof fan that is durable and runs with less friction. This makes it easy to install, maintenance-free and practically inaudible. To ensure safe and reliable operation, the full line is also Wash Down rated for indoor or outdoor use.

Key Specs:

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| <ul style="list-style-type: none">• Airfoil sizes 8 to 18 ft integrate into any medium to large space• Airfoils also available in black• 70% lighter for easy installation, less wear and tear*• Backed by a 50,000-Hour Warranty | <ul style="list-style-type: none">• On-board AirBrain adapts to input voltages, optimizes motor control• No gearbox means silent operation, zero maintenance• Integrates into HVAC and other automated building systems via gateway• Wash Down Duty rated for indoor / outdoor use |
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WARRANTY AND SAFETY

Safety Components: Safety Cable, Rapid Mount Industrial, Blade Retainer Links

Warranty: Lifetime: 50,000 operating hours

MODEL 550

AirVolution^D

AIRFOIL DIAMETER

Model Number	MA08XL5506	MA10XL5506	MA12XL5506	MA14XL5506	MA16XL5506	MA18XL5506
Diameter	8	10	12	14	16	18
Airfoil Style	7.375" Extruded Anodized					
Number of Airfoils	6	6	6	6	6	6

PERFORMANCE

Max Displacement Forward**	53,000 CFM [89,400 m3/h]	84,000 CFM [142,800 m3/h]	106,000 CFM [180,600 m3/h]	132,000 CFM [223,800 m3/h]	158,000 CFM [269,400 m3/h]	181,000 CFM [307,800 m3/h]
Max Thrust Forward	18 lbf [79 N]	29 lbf [127 N]	32 lbf [141 N]	37 lbf [162 N]	39 lbf [174 N]	41 lbf [181 N]
Max Displacement Reverse**	29,000 CFM [49,200 m3/h]	49,000 CFM [84,000 m3/h]	76,000 CFM [128,400 m3/h]	86,000 CFM [146,400 m3/h]	114,000 CFM [194,400 m3/h]	127,000 CFM [214,800 m3/h]
Max Thrust Reverse	5 lbf [24 N]	10 lbf [49 N]	16 lbf [71 N]	15 lbf [68 N]	22 lbf [96 N]	20 lbf [89 N]
Variable Speed	1-220 RPM	1-170 RPM	1-137 RPM	1-110 RPM	1-90 RPM	1-74 RPM
Max Power Usage	730 W	850 W	920 W	890 W	1070 W	900 W
Drive and Motor Efficiency at	80%	78%	75%	73%	65%	63%
Recommended Industry	60 ft [18.3 m]	65 ft [19.8 m]	70 ft [21.3 m]	80 ft [24.4 m]	90 ft [27.4 m]	95 ft [29 m]
Max Affected Area*****	4,000 ft2 [372 m2]	6,600 ft2 [613 m2]	8,800 ft2 [818 m2]	11,000 ft2 [1,022 m2]	13,000 ft2 [1,208 m2]	15,000 ft2 [1,394 m2]
Max Sound Level*****	TBA*	TBA*	TBA*	TBA*	TBA*	TBA*

WEIGHT AND DIMENSIONS

Hanging Weight	120 lb [54.4 kg]	128 lb [58.2 kg]	140 lb [63.5 kg]	147 lb [66.5 kg]	151 lb [68.5 kg]	160 lb [72.6 kg]
Total Shipping Weight	188 lbs [89.8 kg]	208 lbs [94.3 kg]	218 lbs [98.9 kg]	239 lbs [108.4 kg]	248 lbs [112.5 kg]	267 lbs [121.1 kg]
Motor System Shipping Weight	122 lbs [55.3 kg]	122 lbs [55.3 kg]	122 lbs [55.3 kg]	122 lbs [55.3 kg]	122 lbs [55.3 kg]	122 lbs [55.3 kg]
Motor System Shipping Dimensions	29x30x24 in	29x30x24 in	29x30x24 in	29x30x24 in	29x30x24 in	29x30x24 in
Blade Shipping Weight	76 lbs [34.5 kg]	86 lbs [39 kg]	96 lbs [43.5 kg]	117 lbs [53.1 kg]	126 lbs [57.2 kg]	145 lbs [65.8 kg]
Blade Shipping Dimensions	72x25x15in [1.83x0.64x0.38]	72x25x15in [1.83x0.64x0.38]	72x25x15in [1.83x0.64x0.38]	96x25x15in [2.44x0.64x0.38]	96x25x15in [2.44x0.64x0.38]	108x25x15in [2.74x0.64x0.38]

MOTOR AND DRIVE TRAIN

Motor Type	Sensorless, Brushless, Permanent Magnet, Transverse Flux DC Motor
Drive Train	Direct Drive
Motor Torque Rating	51.6 ft lb [70 Nm]
Equivalent Horsepower Rating	1.05
Max Operating Temp	140°F

POWER AND CONTROLS

Power Source High Range	1-phase or 3-phase (380-600) VAC +/-10%, 50/60 Hz
Power Source Low Range	1-phase or 3-phase (120-277) VAC +/-10%, 50/60 Hz
Offered Controllers	Digital touchpad Standard, MacroAir Controller 6 and 30 Optional
Control Types	Analog or Digital MODBUS 485 (BACnet or LonWorks interface available)

INSTALLATION

Mounting Hardware	Rapid Mount
Drop Extensions	Optional extensions lengths available in 1ft increments; lengths greater than 5ft may require guy wires in adverse conditions

RATINGS AND COMPLIANCE

Fire and Sprinkler	NFPA Compliant
Wash Down Duty Rating	IP66

WARRANTY AND SAFETY

Warranty	50,000 Operating
Safety Components	Safety Cable, Rapid Mount Industrial, Blade Retainer Links

*Data will be added when additional testing and/or information is ready

**Calculation based on AMCA 230-99 equation

***Determined by dividing the mechanical power output of the motor by the electrical input into the fan system

****Delivers 2.8-4.2 ft/s [0.86-1.27 m/s] of average air speed in the occupied space. This relates to perceived cooling or set point change of 4.9-6.1 F [2.7-4.3 C].

*****Delivers 2.7-3.8 ft/s [0.82-1.16 m/s] of average air speed in the occupied space. This relates to a perceived cooling or set point change of 4.8-5.8 F [2.6-3.2 C].