AirVolution^{D} 780

Extra-Large Spaces

Designed for heavy-duty applications, a breaktrhough in motor design allows the powerful AirVolution-D 780 fan to generate 75% more wind power. This makes it perfect for extra-large spaces like warehouses, airplane hangars, airports and stadiums. The fan's durable design also eliminates the gearbox for easy installation, zero maintenance and operation that's practically inaudible. To ensure safe and reliable performance, the full line is Wash Down rated for indoor or outdoor use.

Key Specs:

- Airfoil sizes 20 to 24 ft. fit into any extra-large space
- Airfoils also available in black
- 50% more horsepower for 75% more wind power*
- 45% lighter for easy installation, less wear and tear*
- On-board AirBrain adapts to input voltages, optimizes motor control
- No gearbox means quiet operation and no maintenance
- Integrates into HVAC and other automated building systems via gateway
- Wash Down Duty rated for indoor/outdoor use (IP65)
- Backed by a 50,0000-hour-warranty

**Compared to the leading competitor's similar model*

Touchscreen Remote:

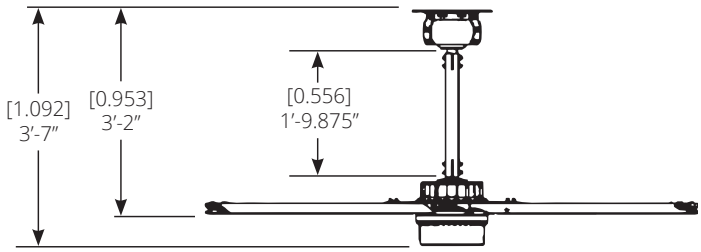
- 20 speed settings
- Forward and reverse
- Integrated warranty hour counter

Warranty:

Standard 50,000-hour non-prorated warranty on parts and components plus a 3-year warranty on labor

Mounting Dimensions:

Illustration shown with standard extension



Basic Specifications:

Airfoil Diameter	20ft	24ft
Model Number	MA20XL7806	MA24XL7806
Airfoil | Blade	Extruded Anondized Aluminum Airfoils | 7.375" Blade Width	
Number of Airfoils	6	6

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PERFORMANCE	20 ft	24 ft
Max Displacement Forward**	250,000 CFM	346,000 CFM
Max Thrust Forward	65 lbf	84 lbf
Max Displacement Reverse**	187,000 CFM	256,000 CFM
Max Thrust Reverse	36 lbf	46 lbf
Variable Speed	1 - 75 RPM	1 - 64 RPM
Max Power Usage	1,180 W	1,550 W
Drive & Motor Efficiency at Max RPM***	79%	73%
Recommended Industry Spacing****	105 ft	115 ft
Max Affected Area*****	20,000 ft^2	22,000 ft^2
Sound Level dBA at 50% Speed******	41	39
Sound Level dBA at 100% Speed ******	57	56

WEIGHTS AND DIMENSIONS		
Hanging Weight	189 lbs	213 lbs
Total Shipping Weight	314 lbs	351 lbs
Motor System Shipping Weight	157 lbs	157 lbs
Motor System Shipping Dimensions	29 x 30 x 26 in	29 x 30 x 26 in
Blade Shipping Weight	160 lbs	197 lbs
Blade Shipping Dimensions	120 x 25 x 15 in	144 x 25 x 15 in

MOTOR AND DRIVE TRAIN	
Motor Type	Sensorless, Brushless, Permanent Magnet, Transverse Flux DC Motor
Drive Train	Gearless Direct Drive
Motor Torque Rating	125.4 ft lb [170 Nm] Continuous
Equivalent Horsepower Rating	2.1 HP
Max Operating Temp	140° F [60° C]

MAX AMP DRAW / RECOMMENDED FUSE		
208-240 VAC 1-Phase	12.5 A / 15	15.1 A / 20
227 VAC 1-Phase	9.4 A / 10	11.3 A / 15
208-240 VAC 3-Phase	6.8 A / 10	8.2 A / 10
380 VAC 3-Phase	3.7 A / 5	4.5 A / 5
480 VAC 3-Phase	2.9 A / 5	3.5 A / 5
600 VAC 3-Phase	2.3 A / 5	2.8 A / 5

POWER AND CONTROLS	
Power Source High	1-Phase or 3-Phase [380-600] VAC +/- 5%, 50/60 Hz
Power Source Low	1-Phase or 3-Phase [120-277] VAC +/- 5%, 50/60 Hz
Offered Controllers	Digital Touchpad Standard, MacroAir Controller 6 and 30
Control Types	Digital MODBUS 485

INSTALLATION	
Mounting Hardware	Rapid Mount industrial
Drop Extensions	In addition to the standard drop length supplied, optional drop lengths are available in 1 inch increments. Total drop lengths 10 feet and greater require guy wires

RATINGS AND COMPLIANCE	
Fire and Sprinkler	NFPA Compliant
Wash Down Duty Rating	IP65

* 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 to the system.
**** Delivers 2.8 - 4.2 ft/s of average air speed in the occupied space. This relates to perceived cooling or set point change or 4.9-6.1° F. Consult EnergyLogic LLC for more details.
***** Delivers 2.7 - 3.8 ft/s of average air speed in the occupied space. This relates to perceived cooling or set point change or 4.8-5.8° F. Consult EnergyLogic LLC for more details.
****** Sound testing taken with sensor 5 ft above the ground and 20 ft from the center of the fan at 20 ft high.