

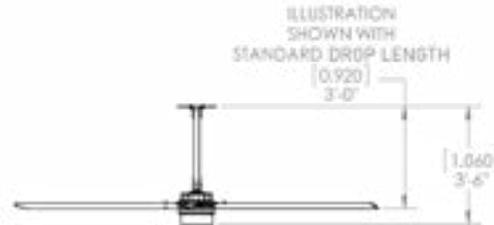
## AirVolution-D3

The three-blade design of the AirVolution-D3 reduces weight, friction, and raw materials, which in turn minimizes the strain on the building, your energy consumption, and your budget. But can three blades do the job? Yes! Just like a wind turbine, we designed the AirVolution-D3 to be the optimal balance between weight, materials, and efficiency.



### STANDARD FEATURES

- Direct Drive motor
- Clearcoat anodized airfoil blades with centrifugal cooling
- Forward, reverse, variable speed
- Rated for indoor and outdoor use\*
- Capable of Building Automation Integration (with AirLynk upgrade) and fire alarm
- Digital wall controller with fault code access
- Safety Components: safety cable, Universal Mount with guy wires, blade retainer links



### STEP 1: POWER UNIT

Item #	Options	Qty
M300-0025-MA	8-14 ft AVD3 Power Unit, .75 HP Equivalent	
M300-0035-MA	16-24 ft AVD3 Power Unit, 1 HP Equivalent	

### STEP 2: BLADES

Item #	Diameter	Qty
60-30008-00	8 ft / 2.44 m	
60-30010-00	10 ft / 3.05 m	
60-30012-00	12 ft / 3.66 m	
60-30014-00	14 ft / 4.27 m	
60-30016-00	16 ft / 4.88 m	
60-30018-00	18 ft / 5.49 m	
60-30020-00	20 ft / 6.10 m	
60-30024-00	24 ft / 7.32 m	

### STEP 3: VOLTAGE/PHASE

Item #	Options	Qty
33-21010-00	208-240V Single Phase, 50/60 Hz	
33-21030-00	208-240V Three Phase, 50/60 Hz	
33-41030-00	480V Three Phase, 50/60 Hz	

### STEP 4: MOUNTING

Item #	Options	Qty
60-50150-00	AVD Universal Mount with I-beam Hardware Kit	
60-40049-00	Glulam Hardware Kit	

### STEP 5: CONTROLS

Item #	Description	Qty
30-90308-00	Digital Remote Assembly (Standard)	
30-04006-00	Controller 4	
30-04007-00	Controller 4 + Temperature Sensor	
30-04030-00	Controller 30	
30-10012-01	AirLynk - BacNet	
30-10011-00	AirLynk - LonWorks	
30-04030-02	Dual Control Enabled Controller 30 (requires AirLynk-BacNet)	
30-04009-00	AirEffect (one per zone, up to 4 per Controller 30)**	

\*Motor unit only, consult with a MacroAir sales specialist for best practice

\*\*Only compatible with Controller 30, pricing is per zone. Not compatible with Dual Control option.

## AirVolution-D3

### STEP 6: STOCK DROP LENGTHS

Item #	Length (ft/in)	Length (m)	Qty
51-D0200-02	2 ft*	0.61 m	
51-D0300-02	3 ft (Standard)	0.91 m	
51-D0400-02	4 ft	1.22 m	
51-D0500-02	5 ft	1.52 m	
51-D0600-02	6 ft	1.83 m	
51-D0700-02	7 ft	2.13 m	
51-D0800-02	8 ft	2.44 m	
51-D0900-02	9 ft	2.74 m	
51-D1000-02	10 ft	3.05 m	
51-Fftin-02	Customization fee		

ft = length in feet (i.e. 04 for 4 feet, 10 for 10 feet)

in = length in inches (i.e. 05 for 5 inches, 10 for 10 inches)

\*2 ft is the shortest allowed drop length for AVD3. Lengths shorter than the standard drop length are not recommended and will not work for some fan diameters. Consult MacroAir for more details.

To order custom Drop Length or length greater than 10 ft, please call MacroAir.

DROP LENGTH is the distance from fan mounting point to the blades.

AirVolution-D3 fans can only be connected with a single-piece of custom length drop tube.

Measure the distance from the fan's mounting point down to the desired fan blade position and provide this information with the fan order to receive the correct custom drop length.

For custom drop lengths, order a length longer and MacroAir will cut it down to the requested length. Estimated lead time is 10 business days.

Do you have a custom color in mind? Custom powder coating is available for all our blades, mounts and drop lengths.

### OPTIONAL: POWDER COATING

Item #	Diameter	Estimated Lead Time	Qty
60-30008-02	8 ft / 2.44 m	15 business days	
60-30010-02	10 ft / 3.05 m	15 business days	
60-30012-02	12 ft / 3.66 m	15 business days	
60-30014-02	14 ft / 4.27 m	15 business days	
60-30016-02	16 ft / 4.88 m	15 business days	
60-30018-02	18 ft / 5.49 m	15 business days	
60-30020-02	20 ft / 6.07 m	15 business days	
60-30024-02	24 ft / 7.32 m	15 business days	

For powder coating colors, please refer to Appendix A.



### ADDITIONAL OPTIONS

Item #	Description	Qty
10-60200-00	AVD Fuse Disconnect*	

\*IEC Compliance requires a fused disconnect switch. Fuse selection is input voltage specific, so fuses are not provided with purchase of a disconnect.

## AirVolution-D3

### BASIC SPECIFICATIONS

AIRFOIL DIAMETER	8ft	10ft	12ft	14ft	16ft	18ft	20ft	24ft
Airfoil Style	7.375" Extruded Anodized Aluminum Airfoil							
Number of Airfoils	3							
<b>PERFORMANCE</b>								
Max Speed	184 RPM	170 RPM	135 RPM	120 RPM	98 RPM	83 RPM	72 RPM	50 RPM
Recommended Spacing*	50 ft [15.2 m]	55 ft [16.8 m]	60 ft [18.3 m]	70 ft [21.3 m]	75 ft [22.9 m]	80 ft [24.4 m]	90 ft [27.4 m]	95 ft [29 m]
Max Affected Area	4,150 ft <sup>2</sup> [385 m <sup>2</sup> ]	5,200 ft <sup>2</sup> [483 m <sup>2</sup> ]	6,700 ft <sup>2</sup> [622 m <sup>2</sup> ]	8,900 ft <sup>2</sup> [827 m <sup>2</sup> ]	9,600 ft <sup>2</sup> [892 m <sup>2</sup> ]	12,600 ft <sup>2</sup> [1,171 m <sup>2</sup> ]	15,400 ft <sup>2</sup> [1,431 m <sup>2</sup> ]	17,000 ft <sup>2</sup> [1,579 m <sup>2</sup> ]
Sound Level dBA at Max Speed**	63	58	57	55	55	55	54	33
Carrier/Switching Frequency**	16,000Hz							
<b>HANGING REQUIREMENTS</b>								
Hanging Weight	102.2 lbs [46.38 kg]	107.3 lbs [48.67 kg]	112.4 lbs [50.98 kg]	117.5 lbs [53.30 kg]	131.8 lbs [59.78 kg]	136.9 lbs [62.10 kg]	142.0 lbs [64.41 kg]	142.0 lbs [64.41 kg]
Max Torque	8 ft-lb [11 Nm]	16 ft-lb [22 Nm]	22 ft-lb [30 Nm]	25 ft-lb [34 Nm]	33 ft-lb [45 Nm]	36 ft-lb [49 Nm]	42 ft-lb [57 Nm]	40 ft-lb [55 Nm]
Max Thrust in Reverse	4 lbs [1.9 kg]	9 lbs [4.1 kg]	11 lbs [5.0 kg]	14 lbs [6.4kg]	18 lbs [8.2 kg]	20 lbs [9.1 kg]	22 lbs [10.0 kg]	18 lbs [8.2kg]
<b>MOTOR AND DRIVE TRAIN</b>								
Motor Type	Gearless Direct Drive							
Equivalent Horsepower Rating	3/4 HP (8ft - 14ft) / 1.0 HP (16ft - 24ft)							
Operating Temp Range	16°F [-10C°] - 140 F° [60C°]							
<b>MAX AMP DRAW</b>								
208-240V Single Phase	1.4A	2.6A	2.7A	2.7A	2.9A	3A	3.1A	2.3A
208-240V Three Phase	0.8A	1.3A	1.6A	1.7A	1.7A	1.7A	1.7A	1.2A
480V Three Phase	0.6A	0.9A	1.0A	1.0A	1.0A	1.0A	1.0A	0.7A
<b>POWER AND CONTROLS</b>								
Power Source	Single Phase or Three Phase 208-240 VAC +/-5%, 50/60 Hz, Three Phase 480 VAC +/-5%, 50/60 Hz							
Control Options	Digital Touchpad, MacroAir Controller 4, Controller 30, AirLynk - BacNet							
<b>INSTALLATION</b>								
Mounting Hardware	Universal Mount							
Drop Length	In addition to the standard drop length supplied, optional drop lengths are available in 1ft increments; all drop lengths require guy wires							
<b>RATINGS AND COMPLIANCE</b>								
Fire and Sprinkler	NFPA Compliant							
Outdoor Rating***	Rated for outdoor use							

\*For spacing between fan units based on the dimensions of a specific space please refer to <https://macroairfans.com/airviz>.

\*\*Sound testing taken with the sensor 5 ft above the ground and 20 ft from the center of the fan at 20 ft high. Carrier frequency will be audible to some listeners and is considered normal during operation. For more information on fan selection with regard to decible level and carrier frequency, please see page XXXX.

\*\*\*Applicable to the fan unit only, does not include controller, control panel and accessories.