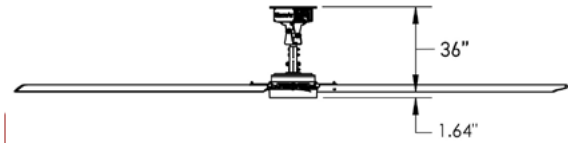


The three-blade design of the AVD3 reduces weight, friction, and raw materials, which in turn minimizes the strain on the building, your energy consumption, and your budget. But can three blades do the job? Yes! Just like a wind turbine, we designed the AVD3 to be the optimal balance between weight, 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 AVD3 DROP ENCL (for use with Universal Mount)	
33-21030-00	208-240V Three Phase, 50/60 Hz AVD3 DROP ENCL (for use with Universal Mount)	
33-41030-00	480V Three Phase, 50/60 Hz AVD3 DROP ENCL (for use with Universal Mount)	
35-21010-00	208-240V Single Phase, 50/60 Hz AVD3 SCHNEIDER CONT PNL (for use with Rapid Mount Industrial)	
35-21030-00	208-240V Three Phase, 50/60 Hz AVD3 SCHNEIDER CONT PNL (for use with Rapid Mount Industrial)	
35-41030-00	480V Three Phase, 50/60 Hz AVD3 SCHNEIDER CONT PNL (for use with Rapid Mount Industrial)	

STEP 4: MOUNTING

Item #	Options	Qty
60-50150-00	AVD Universal Mount with I-beam Hardware Kit	
60-40049-00	Glulam Hardware Kit	
60-50136-00	Rapid Mount Industrial with I-Beam Hardware Kit (requires drive in control panel, offboard)	

STEP 5: CONTROLS

Item #	Description	Qty
30-90308-00	Digital Remote Assembly (Standard)	
30-04006-00	Controller 4	
30-04007-00	Controller 4 + Single Temperature Sensor	
30-04030-00	Controller 30	
30-10012-00	AirLynk - BacNet	
30-10011-00	AirLynk - LonWorks	
30-04030-02	Dual Control Enabled Controller 30 (requires AirLynk-BacNet)	

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

** MacroAir Technologies, Inc. certifies that the model AVD3 (diameters 8'-24') shown herein are licensed to bear the AMCA seal. The ratings shown are based on the tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

STEP 6: STOCK DROP LENGTHS

Item #	Length (ft/in)*	Length (m)	Qty
51-X0200-02	2 ft**	0.61 m	
51-X0300-02	3 ft (Standard)	0.91 m	
51-X0400-02	4 ft	1.22 m	
51-X0500-02	5 ft	1.52 m	
51-X0600-02	6 ft	1.83 m	
51-X0700-02	7 ft	2.13 m	
51-X0800-02	8 ft	2.44 m	
51-X0900-02	9 ft	2.74 m	
51-X1000-02	10 ft	3.05 m	
51-Xftin-02	Customization fee		

* Lengths are +/- 1" depending on power unit selection/fan diameter.

X= substitute D for drops with UMH mount, F for drops with Rapid Mount Industrial (i.e. 51-F0500-02 describes a 5' drop for use with a Rapid Mount Industrial).

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.

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.

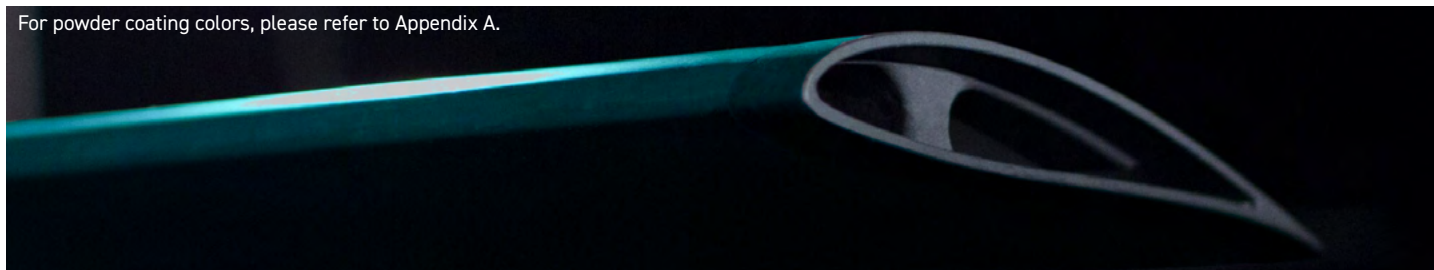
For custom drop lengths, order a length longer and MacroAir will cut it down to the requested length. Estimated lead time is 10 business days.

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.

BASIC SPECIFICATIONS

AIRFOIL DIAMETER	8ft	10ft	12ft	14ft	16ft	18ft	20ft	24ft
Airfoil Style	7.375" Extruded Anodized Aluminum Airfoil							
Number of Airfoils	3							
PERFORMANCE								
Max Speed	178 RPM	170 RPM	135 RPM	99 RPM	97 RPM	83 RPM	66 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 ² [385 m ²]	5,200 ft ² [483 m ²]	6,700 ft ² [622 m ²]	8,900 ft ² [827 m ²]	9,600 ft ² [892 m ²]	12,600 ft ² [1,171 m ²]	15,400 ft ² [1,431 m ²]	17,000 ft ² [1,579 m ²]
Sound Level dBA at Max Speed**	63	58	57	55	55	55	54	33
Carrier/Switching Frequency**	16,000Hz							
HANGING REQUIREMENTS								
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]	147.1 lbs [66.72 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]
MOTOR AND DRIVE TRAIN								
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°]							
MAX AMP DRAW								
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
POWER AND CONTROLS								
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							
INSTALLATION								
Mounting Hardware	Universal Mount, Rapid Mount Industrial							
Drop Length	In addition to the standard drop length supplied, optional drop lengths are available in 1ft increments; all drop lengths require guy wires except when used with Rapid Mount Industrial							
RATINGS AND COMPLIANCE								
Fire and Sprinkler	NFPA Compliant							
Outdoor Rating***	Rated for outdoor use							
Certifications	Pending							

*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.



PERFORMANCE SPECIFICATIONS

Fan Diameter (Ft)	Fan Speed (% of max RPM)	Fan Speed (RPM)	Voltage/ Phase/ Frequency	Standby Power (Watts)	Electrical Input Power (Watts)	Airflow Rate (CFM)	CFEI 40	CFEI 100	Direction	Reverse Operation?
8	20	35.38	230/Single Phase/60Hz	6	48.09	5615.19	6.62	3.32	Forward	Yes
	40	71.01	230/Single Phase/60Hz		68.46	8220.68			Forward	Yes
	60	106.64	230/Single Phase/60Hz		110.82	15740.56			Forward	Yes
	80	142.45	230/Single Phase/60Hz		177.47	22910.32			Forward	Yes
	100	178.26	230/Single Phase/60Hz		302.38	28955.18			Forward	Yes
10	20	33.74	230/Single Phase/60Hz	6	54.19	4777.94	5.78	2.49	Forward	Yes
	40	67.71	230/Single Phase/60Hz		87.03	17734.02			Forward	Yes
	60	101.63	230/Single Phase/60Hz		163.15	28949.29			Forward	Yes
	80	134.81	230/Single Phase/60Hz		297.58	40008.54			Forward	Yes
	100	169.48	230/Single Phase/60Hz		547.13	50660.53			Forward	Yes
12	20	26.62	230/Single Phase/60Hz	6	53.01	9046.67	5.54	2.24	Forward	Yes
	40	53.76	230/Single Phase/60Hz		87.82	25273.03			Forward	Yes
	60	80.63	230/Single Phase/60Hz		171.57	40036.86			Forward	Yes
	80	75.46	230/Single Phase/60Hz		330.72	55256.96			Forward	Yes
	100	134.68	230/Single Phase/60Hz		638.20	69713.93			Forward	Yes
14	20	19.51	230/Single Phase/60Hz	6	44.04	1425.63	6.95	2.77	Forward	Yes
	40	39.33	230/Single Phase/60Hz		70.28	25865.40			Forward	Yes
	60	59.17	230/Single Phase/60Hz		126.88	42280.52			Forward	Yes
	80	78.92	230/Single Phase/60Hz		241.44	58561.71			Forward	Yes
	100	98.67	230/Single Phase/60Hz		434.25	75251.48			Forward	Yes
16	20	19.33	230/Single Phase/60Hz	6	54.50	15335.33	5.94	2.19	Forward	Yes
	40	38.95	230/Single Phase/60Hz		91.67	39545.21			Forward	Yes
	60	58.60	230/Single Phase/60Hz		180.74	61200.30			Forward	Yes
	80	78.07	230/Single Phase/60Hz		350.41	83384.88			Forward	Yes
	100	97.00	230/Single Phase/60Hz		684.09	104876.32			Forward	Yes
18	20	16.39	230/Single Phase/60Hz	6	53.12	17817.55	6.28	2.31	Forward	Yes
	40	32.95	230/Single Phase/60Hz		87.00	45635.74			Forward	Yes
	60	49.58	230/Single Phase/60Hz		168.67	70337.92			Forward	Yes
	80	66.08	230/Single Phase/60Hz		318.39	94305.04			Forward	Yes
	100	82.64	230/Single Phase/60Hz		620.56	119692.30			Forward	Yes
20	20	13.16	230/Single Phase/60Hz	6	47.55	16079.19	6.76	2.70	Forward	Yes
	40	26.52	230/Single Phase/60Hz		79.25	49292.86			Forward	Yes
	60	40.08	230/Single Phase/60Hz		148.22	77963.62			Forward	Yes
	80	53.58	230/Single Phase/60Hz		285.82	106186.57			Forward	Yes
	100	65.65	230/Single Phase/60Hz		514.42	135000.63			Forward	Yes
24	20	9.84	230/Single Phase/60Hz	6	48.84	21674.27	7.08	2.46	Forward	Yes
	40	19.65	230/Single Phase/60Hz		75.40	59144.25			Forward	Yes
	60	29.66	230/Single Phase/60Hz		140.83	94937.00			Forward	Yes
	80	39.73	230/Single Phase/60Hz		268.88	126192.12			Forward	Yes
	100	49.69	230/Single Phase/60Hz		502.45	157858.96			Forward	Yes