

AirVolution-D 780

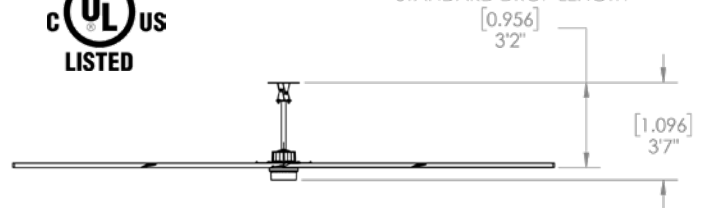


STANDARD FEATURES

- Clearcoat anodized airfoil blades with centrifugal cooling
- Forward, reverse, variable speed
- Rated for indoor and outdoor use
- Adapts to input voltages and optimizes motor control
- Integrates with building automation systems
- Digital wall controller with fault code access
- Safety components: safety cable, universal mount with guy wires, blade retainer links



ILLUSTRATION SHOWN WITH STANDARD DROP LENGTH



STEP 1: POWER UNIT

Item #	Options	Horsepower	Qty
P780-780L-MA	AVD 780 Low Voltage - 208-240V +/-5% Single or Three Phase, 50/60 Hz	2.1 HP	
P780-780H-MA	AVD 780 High Voltage - 380-600V +/-5% Three Phase, 50/60 Hz	2.1 HP	

STEP 2: FAN BLADE DIAMETER

Item #	Diameter	Qty
60-10020-00	20 ft / 6.10 m	
60-10024-00	24 ft / 7.32 m	

STEP 3: MOUNTING

Item #	Options	Qty
60-50103-00	AVD Universal Mount with I-beam Hardware Kit	
60-50109-00	Rapid Mount Industrial with I-beam Hardware Kit	
60-40041-00	Glulam Hardware Kit (for AVD Universal Mount or Rapid Mount Industrial)	

STEP 4: CONTROLS

Item #	Description	Qty
30-90308-00	Digital Remote Assembly	
30-04030-00	Controller 30*	
30-10010-00	AirLynk - BacNet*	
30-10011-00	AirLynk - LonWorks*	
30-04009-00	AirEffect (per zone)**	

*Applicable for deduction per fan ordered
 **Only available for Controller 30 (Not Included)

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STEP 5: STOCK DROP LENGTHS

Item #	Length (ft/in)	Length (m)	Qty
50-90300-0x	3 ft 2 in*	0.97 m	
50-90400-0x	4 ft 2 in	1.27m	
50-90500-0x	5 ft 2 in	1.57 m	
50-90600-0x	6 ft 2 in	1.88 m	
50-90700-0x	7 ft 2 in	2.18 m	
50-90800-0x	8 ft 2 in	2.49 m	
50-90900-0x	9 ft 2 in	2.79 m	
50-91000-0x	10 ft 2 in	3.10 m	
[50-9ftin-0x]**	Customization fee		

x = 2 for AVD Universal Mount,
or 3 for 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)

*3 ft 2 in is the shortest allowed drop length for AVD 780.

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-D 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.

OPTIONAL: POWDER COATING

Item #	Diameter	Estimated Lead Time	Qty
60-10020-02	20 ft / 6.07 m	15 business days	
60-10024-02	24 ft / 7.32 m	15 business days	
Special Finishes			
Mounting hardware & drop length	All Diameters	15 business days	
Hub Cover	All Diameters	15 business days	

xx = ft, fan diameter (i.e. 20 for 20ft)

For powder coating colors, please refer to Appendix A.

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

ADDITIONAL OPTIONS

Item #	Description	Qty
10-60200-00	AVD Fuse Disconnect Switch	
60-41002-00	AVD 550/780, AVD3 Light Kit	

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STANDARD FEATURES

- Provides a single point for individual or group fan control
- Enables run time, scheduling, grouping, and fan naming
- Secure remote login to controller via smart device or computer
- Optional automode available with AirEffect
- Password protection capabilities for scheduling, naming, and temperature/humidity



Features	Controller 30
Qty	
Item #	30-04030-00
# Fans Controlled	30 fans
Display	10.1" (16:9), TFT-LCD with LED backlight
Resolution	1024x600 pixels
Backlight life time	50000 hours
Backlight brightness	500 cd/m2
Shock	15g, half-sine, 11ms according to IEC60068-2-27
Vibration	1g, according to IEC 60068-2-6, Test Fc
Sealing front	IP65, NEMA 4X/ 12 and UL Type 4X/ 12
Sealing back (excl. enclosure)	IP20
Weight (incl. enclosure)	10 lb / 4.5 kg
Communication Protocol	MODBUS RS485
Ethernet Port	2x100 Mbit
USB Port	2
Power Supply	110-240 V
Size (incl. enclosure)	10.7 x 13.0 x 3.7 in (W x H x D) / 272 x 330 x 84 mm (W x H x D)
Operating Temperature	14° to 140°F / -10° to +60°C
Storage Temperature	-4° to 158°F / -20° to +70°C
Languages	English, Spanish, French, Malay

Note: Only one type of fan control can be used: Controller 30, Digital Remote Assembly, or AirLynk.

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BASIC SPECIFICATIONS

AIRFOIL DIAMETER	20ft	24ft
Airfoil Style	7.375" Extruded Anodized Aluminum Airfoil	
Number of Airfoils	6	
PERFORMANCE		
Max Speed	75 RPM	64 RPM
Recommended Spacing*	105 ft [32 m]	115 ft [35.1 m]
Max Affected Area	20,000 ft ² [1,858 m ²]	22,000 ft ² [2,044 m ²]
Sound Level dBA at Max Speed**	57	56
Sound Level dBA at Half Speed**	41	39
HANGING REQUIREMENTS		
Hanging Weight	214 lbs [97.1 kg]	239 lbs [108.4 kg]
Max Torque	88 lb/ft [119 Nm]	121 lb/ft [164 Nm]
Max Thrust in Reverse	32 lbs [14.5 kg]	40 lbs [18.1 kg]
MOTOR AND DRIVE TRAIN		
Motor Type	Gearless Direct Drive	
Equivalent Horsepower Rating	2.1 HP	
Operating Temp Range	16°F [-10C°] - 140 F° [60C°]	
MAX AMP DRAW / RECOMMENDED FUSE		
208-240 VAC Single Phase	12.5A / 15	15.1A / 20
208-240 VAC Three Phase	6.8A / 10	8.2A / 10
380 VAC Three Phase	3.7A / 5	4.5A / 5
480 VAC Three Phase	2.9A / 5	3.5A / 5
600 VAC Three Phase	2.3A / 5	2.8A / 5
POWER AND CONTROLS		
Power Source High	Three Phase (380-600) VAC +/-5%, 50/60 Hz	
Power Source Low	Single Phase or Three Phase (208-240) VAC +/-5%, 50/60 Hz	
Control Options	Digital Touchpad, MacroAir Controller 30, AirLynk - BacNet / LonWorks	
INSTALLATION		
Mounting Hardware	Universal Mount	
Drop Length	In addition to the standard drop length supplied, optional drop lengths are available in 1ft increments; guy wires required with Universal Mount; with Rapid Mount guy wires are optional	
RATINGS AND COMPLIANCE		
Fire and Sprinkler	NFPA Compliant	
Outdoor Rating***	Rated for outdoor use	
Certifications	UL 507, CE	

*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.

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

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Fan Placement & Clearance

