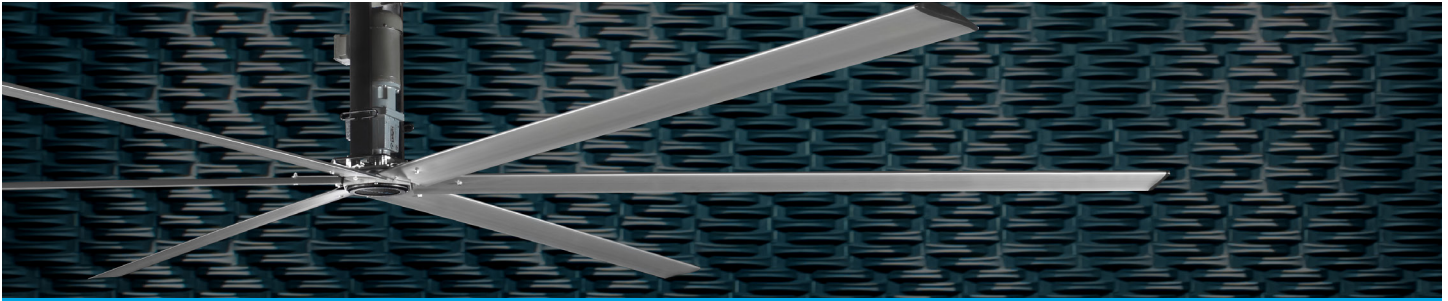
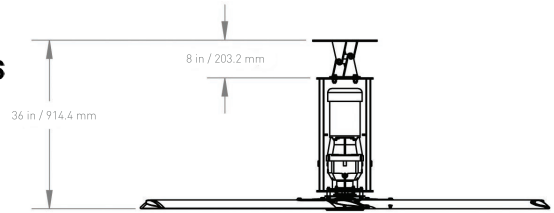


# AIRVOLUTION



## STANDARD FEATURES

- Clearcoat anodized patented airfoil blades
- Forward, reverse, variable speed
- Variable Frequency Drive – capable of fire alarm and automated building systems integration
- Digital wall controller with fault code access
- Safety Components: Safety Cable, Universal Mount with Guy Wires, Blade Retainer Links
- See the last page for product specifications



## STEP 1: DIAMETERS

Item #	Diameter	Motor Horsepower	Qty
AV08	8 ft / 2.44 m	1.0 HP	
AV10	10 ft / 3.05 m	1.0 HP	
AV12	12 ft / 3.66 m	1.0 HP	
AV14	14 ft / 4.27 m	1.0 HP	
AV16	16 ft / 4.88 m	1.0 HP	
AV18	18 ft / 5.49 m	1.0 HP	
AV20	20 ft / 6.07 m	1.5 HP	
AV24	24 ft / 7.32 m	2.0 HP	

## STEP 2: VOLTAGE

Item #	Voltage Options	Qty
1101-MA	100-120V Single Phase, 50/60 Hz*	
2101-MA	208-240V Single Phase, 50/60 Hz	
2103-MA	208-240V Three Phase, 50/60 Hz	
4103-MA	480V Three Phase, 50/60 Hz	
6103-MA	600V Three Phase, 50/60 Hz	

## STEP 3: MOUNTING

Item #	Mount Options	Qty
60-90006-00	AirVolution Universal Mount with I-beam Hardware Kit	
60-40041-00	Glulam Hardware Kit (for AirVolution Universal Mount)	

## STEP 4: CONTROLS

Item #	Description	Qty
30-90308-00	Digital Remote Assembly	
30-90301-00	Analog Remote Assembly	
30-04006-00	Controller 4**	
30-04007-00	Controller 4 with 1 temperature sensor**	
30-04010-00	Controller 10**	
30-04020-00	Controller 20**	
30-04030-00	Controller 30**	
30-10010-00	AirLynk - BacNet**	
30-10011-00	AirLynk - LonWorks**	
10-80632-00	Repeater	
10-04009-00	AirEffect (per zone)***	

\*Not available for 20 ft & 24 ft fans

\*\*Deduction applicable per fan ordered

\*\*\*Controller not included

# AIRVOLUTION

## OPTIONAL: EXTENSIONS

Item #	Length (ft/in)	Length (m)	Qty
50-800in-02	0 ft 1 in - 0 ft 11 in	0.025 m - 0.28 m	
50-801in-02	1 ft - 1 ft 11 in	0.30 m - 0.58 m	
50-802in-02	2 ft - 2 ft 11 in	0.61 m - 0.89 m	
50-803in-02	3 ft - 3 ft 11 in	0.91 m - 1.19 m	
50-804in-02	4 ft - 4 ft 11 in	1.22 m - 1.50 m	
50-805in-02	5 ft - 5 ft 11 in	1.52 m - 1.80 m	
50-806in-02	6 ft - 6 ft 11 in	1.82 m - 2.11 m	
50-807in-02	7 ft - 7 ft 11 in	2.13 m - 2.41 m	
50-808in-02	8 ft - 8 ft 11 in	2.44 m - 2.72 m	
50-809in-02	9 ft - 9 ft 11 in	2.74 m - 3.02 m	

Most Extensions are built to order. Please order the necessary extension length at the same time that you order the fans.

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

To order Drop Length greater than 10 ft please call MacroAir.

## OPTIONAL: POWDER COATING

Item #	Diameter	Estimated Lead Time	Qty
60-10008-PC	8 ft / 2.44 m	15 business days	
60-10010-PC	10 ft / 3.05 m	15 business days	
60-10012-PC	12 ft / 3.66 m	15 business days	
60-10014-PC	14 ft / 4.27 m	15 business days	
60-10016-PC	16 ft / 4.88 m	15 business days	
60-10018-PC	18 ft / 5.49 m	15 business days	
60-10020-PC	20 ft / 6.07 m	15 business days	
60-10024-PC	24 ft / 7.32 m	15 business days	

### Special Blades Finishes

60-102xx-00 (Flat Black)	All Diameters	15 business days	
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### Special Frame & Extension Finishes

70-10610-02	All Diameters	15 business days	
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xx = ft, fan diameter (i.e. 08 for 8ft, 20 for 20 ft)

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

## ADDITIONAL OPTIONS

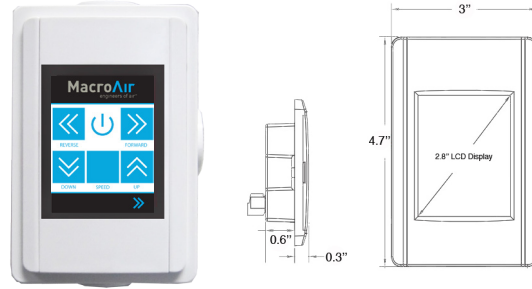
Item #	Description	Qty
-FD	Food-Grade / Stainless Steel - 1.0 HP	
-EX	Explosion Proof Motor -1.0 HP	

# AIRVOLUTION

## CONTROL OPTIONS

### Digital Remote

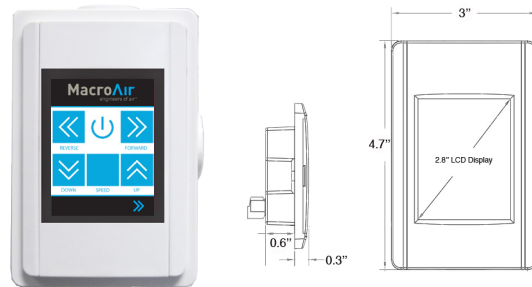
- Works with all MacroAir fan models
- Controls 1 fan
- Simple and intuitive control
- Temperature sensor (optional) starts and stops the fan(s) according to a set temperature point
- 3-Year Warranty



Features	Digital Remote
Qty	
Item #	30-90308-00
# Fans Controlled	1 fan
Display	2.8 TFT
Resolution	240x320x16 pixels
Backlight life time	20,000 hours
Backlight brightness	160 cd/m2
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-6
Rating (front)	IP 40 / NEMA 1
Weight (incl. enclosure)	375 g
Communication Protocol	RS 485
Power Supply	24V from fan
Size (incl. enclosure)	91.2 x 135.5 x42.0
Operating Temperature	-4° to 158°F / -20° to +70°C
Storage Temperature	-22° to 176°F / -30° to +80°C

### Controller 4

- Works with all MacroAir fan models
- Control up to 4 fans from a single point
- Simple and intuitive control
- Temperature sensor (optional) starts and stops the fan(s) according to a set temperature point
- 3-Year Warranty



Features	Controller 4	Controller 4 with 1 temperature sensor
Qty		
Item #	30-04006-00	30-04007-00
# Fans Controlled	Up to 4 fans	

All other specifications are the same as the Digital Remote above

# AIRVOLUTION

## MacroAir Controller 10 / 20 / 30

- Works with all MacroAir fan models
- 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 10	Controller 20	Controller 30
Qty			
Item #	30-04010-00	30-04020-00	30-04030-00
# Fans Controlled	10 fans	20 fans	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	IP20 (excl. enclosure)		
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		

MacroAir Controller requires one Repeater for every 5 fans.

## PROJECT

### Project Information

Job Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Distributor \_\_\_\_\_  
 Quantity \_\_\_\_\_

### Certified By

Name \_\_\_\_\_  
 Company \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Date \_\_\_\_\_

# AIRVOLUTION

## BASIC SPECIFICATIONS

AIRFOIL DIAMETER	8ft	10ft	12ft	14ft	16ft	18ft	20ft	24ft
Airfoil Style	7.375" Extruded Anodized Aluminum Airfoil							
Number of Airfoils	6							
<b>PERFORMANCE</b>								
Max Speed	209 RPM	162 RPM	120 RPM	105 RPM	88 RPM	72 RPM	73 RPM	62 RPM
Recommended Spacing*	50 ft [15.2 m]	60 ft [18.3 m]	65 ft [19.8 m]	70 ft [21.3 m]	85 ft [25.9 m]	90 ft [27.4 m]	100 ft [30.5 m]	110 ft [33.5 m]
Max Affected Area	3,600 ft <sup>2</sup> [336 m <sup>2</sup> ]	6,000 ft <sup>2</sup> [557 m <sup>2</sup> ]	8,000 ft <sup>2</sup> [743 m <sup>2</sup> ]	10,000 ft <sup>2</sup> [929 m <sup>2</sup> ]	12,000 ft <sup>2</sup> [1,115 m <sup>2</sup> ]	14,000 ft <sup>2</sup> [1,301 m <sup>2</sup> ]	18,000 ft <sup>2</sup> [1,673 m <sup>2</sup> ]	20,000 ft <sup>2</sup> [1,858 m <sup>2</sup> ]
Sound Level dBA at Max Speed**	58	58	58	58	58	58	61	61
<b>HANGING REQUIREMENTS</b>								
Hanging Weight	193 lbs [87.7 Kg]	200 lbs [90.6 Kg]	211 lbs [95.6 Kg]	217 lbs [98.5 Kg]	224 lbs [101.6 Kg]	230 lbs [104.3 Kg]	239 lbs [108.4 Kg]	270 lbs [122.5 Kg]
Max Torque	18 lbf/ft [24 Nm]	24 lbf/ft [33 Nm]	31 lbf/ft [42 Nm]	43 lbf/ft [58 Nm]	40 lbf/ft [54 Nm]	58 lbf/ft [79 Nm]	88 lbf/ft [119 Nm]	126 lbf/ft [171 Nm]
Max Thrust in Reverse	4 lbs [1.8 kg]	6 lbs [2.7 kg]	9 lbs [4.1 kg]	14 lbs [6.4 kg]	15 lbs [6.8 kg]	21 lbs [9.5 kg]	31 lbs [14.1 kg]	44 lbs [20 kg]
<b>MOTOR AND DRIVE TRAIN</b>								
Motor Type	AC induction Motor with a sealed 2-stage helical gear box							
Equivalent Horsepower Rating	1.0 HP [8-18ft] / 1.5 HP [20ft] / 2.0 HP [24ft]							
Operating Temp Range	16°F [-10C°] - 104 F° [40C°]							
<b>MAX AMP DRAW / RECOMMENDED FUSE</b>								
100-120V Single Phase	11.6A / 15	11.6A / 15	11.6A / 15	11.6A / 15	11.6A / 15	11.6A / 15	11.6A / 15	11.6A / 15
208-240V Single Phase	11.6A / 15	11.6A / 15	11.6A / 15	11.6A / 15	11.6A / 15	11.6A / 15	11.6A / 15	11.6A / 15
208-240V Three Phase	6.7A / 10	6.7A / 10	6.7A / 10	6.7A / 10	6.7A / 10	6.7A / 10	6.7A / 10	6.7A / 10
480V Three Phase	3.5A / 5	3.5A / 5	3.5A / 5	3.5A / 5	3.5A / 5	3.5A / 5	3.5A / 5	3.5A / 5
600V Three Phase	1.6A / 5	1.6A / 5	1.6A / 5	1.6A / 5	1.6A / 5	1.6A / 5	1.6A / 5	1.6A / 5
<b>POWER AND CONTROLS</b>								
Power Source	Single Phase 100-120 VAC / Single Phase 208-240 VAC / Three Phase 208-240 VAC / Three Phase 480 VAC / Three Phase 600 VAC 50/60 Hz							
Control Options	Digital Touchpad, MacroAir Controller 4, 10, 20, 30, AirLynk - BacNet / LonWorks							
<b>INSTALLATION</b>								
Mounting Hardware	AirVolution Universal Mount							
Extension	Optional extensions are available in 1in increments; all drop lengths require guy wires							
<b>RATINGS AND COMPLIANCE</b>								
Fire and Sprinkler	NFPA Compliant							
Wash Down Duty Rating***	IP55							
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 control panel.

## Fan Placement & Clearance

