

PRODUCT SUBMITTAL

MCC 880 Series



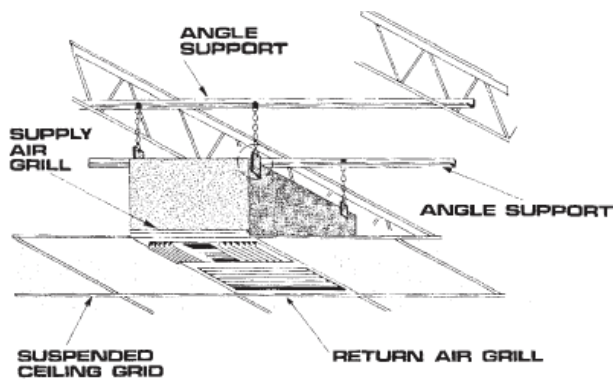
APPLICATION

AtmosAir Systems are used in hundreds of applications including indoor air quality, odor control, air pollution control and electronic corrosion control. They are particularly effective in areas of strong offensive odors and high concentrations of particulate. Successful applications include:

- Office Buildings
- Restaurants
- Hospitals / Animal Facilities
- Education Campuses
- Laboratories / Data Centers
- Commercial Facilities

Features & Benefits

- Neutralizes odors / Electrolyzes mold, bacteria & viruses
- Removes particles, including submicronic sizes
- Simple installation, easy maintenance
- No need to increase outside air for dilution
- More efficient & effective than electronic air cleaners
- Reduces static electricity



SPECIFICATIONS

General Product Information	
System Description	Self-contained; Bi-polar Ionization, UV-C Sterilization, Gas Phase Filter Media; High Efficiency HEPA Filters
Standard Features	
Size	47.75" x 23.75" x 12.0" 1213mm x 603mm x 305mm
Weight	76 to 97 lbs (34.6 to 44.1 kg)
Material	Type 5052 Aluminum
Blower	DWDI, forward curved, twin units
Blower Motor	1/8 Hp, 1725 rpm, 2.0 amps, 2 speed, direct drive
Rated Capacity	9,000 cu. ft. (255 cu. m.)
Air Delivery	700 CFM (1,190 CMH)
Average Sound Pressure	55 dB (High), 45 dB (Low)
Filter Stages	Up to Five (5)
Filter Change Indicator	Prefilters & Primary Filter
Acoustical Foam	Full Coverage
Electrical	
Voltage	115 VAC
Frequency	60 Hz
Current Draw	500 mA (5.0 Amps)
Optional Features	
ASHRAE Standard 52.2 Filters	Absolute Filter (95% to 99.97% DOP)
Electrically Enhanced Media	Particle Removal to 0.01 μ
Bi-polar Ionization	Tube (Size 1E)
BPI Odor Control Capacity	Tube 1E: 3,960 cu. ft. (112 cu. m.)
UV-C Sterilization	Lamps
Gas Phase Media	Three Standard Filters; Throw Away
Remote Control	BMS Interface
Face Grilles	Color: Black

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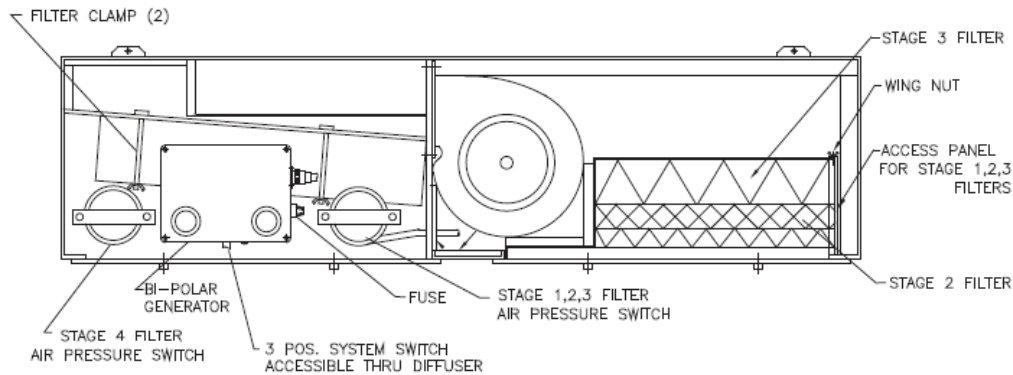
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PERFORMANCE DATA

Representative Filter Combinations	Blower Speed	Noise Criteria ₁		Air Delivery ₁			
				60 Hz		50 Hz	
				115 V cfm	230 V cmh	230 V cfm	230 V cmh
MC-8813A, MC-8811C, MC-8821 (3-ply panel, 2 in. prefilter, 99.97% HEPA)	High Low	48 43	46	500 250	850	400	680
MC-8813A, MC-8811C, MC-8815 (3-ply panel, 2 in. prefilter, 95% DOP)	High Low	50 40	48	625 300	1063	500	850
MC-8813A, MC-8811C, MC-8827A (3-ply panel, 2 in. prefilter, 4 in. MERV 14 ESM ₃)	High Low	54 40	50	700 320	1190	560	952
MC-8811C, MC-8827C (2 in. prefilter, 4 in. MERV 11 ESM)	High Low	56 42	54	925 400	1573	740	1258
MC-8811C, MC-8836C/D, MC-8827C (2 in. prefilter, 2 x 2 in. T/A Media, 4 in. MERV 11 ESM)	High Low	54 40	50	700 320	1190	560	952
MC-8811C, MC-8836C, MC-8827A (2 in. prefilter, 2 in. T/A Media, 4 in. MERV 14 ESM)	High Low	50 40	49	600 300	1020	480	816

- 1) Test data developed at sea level with clean filters.
- 2) Noise Level measured one meter from supply grille in a standard office environment with carpeting, accoustical ceiling tile & dry wall partions.
- 3) ESM = Extended Surface Minipleat



Section View MC-880 with MC-8865

Selection Procedures:

1. Determine the air exchange rate required from the Applications & Selection Guide, Engineering Catalog, Section 3.
2. Calculate air delivery required from the MC-880.
Air Delivery (cfm) = (Room Volume x Air Exchange Rate) ÷ 60.
3. Calculate the odor control requirement for Bi-polar Ionization in the given application.
Quantity of E tubes = Actual Room Volume ÷ (Performance Factor x 3960)
4. Select filters from Filter Selection Guide, page 4.
5. Determine the actual airflow from the MC-880 with the selected filters.
6. Determine the quantity of E tubes and MC-880 units required.

- Notes:
1. Gas phase media may be used in place of Bi-polar Ionization for odor control. Refer to page 4 or the Engineering Catalog, Section 3.
 2. Obtain the Performance Factor for Bi-polar Ionization and suggested Air Exchange Rate from the Engineering Catalog, Section 3.

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FILTER SELECTION GUIDE

Applications (Partial List)	Stage I		Stage II, III				Stage IV				Stage V	Stage III-B	
	MC-8813	MC-8811	MC-8836			MC-8826	MC-8827	MC-8815	MC-8821	Bi-polar Ion	UV "C" ₅		
	A	A	B	C	D	E	A	C					
Anatomy Laboratory	X			X	X			X		S		X	
Animal Holding Rooms (Odor)	X			X	X			X		S		X	
Animal Holding Rooms (Disease)	X										X	X	S ₄
Biology Laboratories			X	X	X		S	X				X	
Breweries/Taste Test		X		X	X			X				O	
Chemistry Laboratories		X		X ₂	X ₂	S ₂	S	X				O	
Commercial Printing	X	S		X	X	S		S	X			X	
Computer Print Room	X	S	S	O				X		S		X	
Cosmetology	X	S		X	O		X		S			X	
Diazo Process		S	X	X	O	S ₁	X		S			X	
Graphic Arts	S	X	X	X	O			S	X			X	
Hospitals/Patient Rooms, ICU ₃	X			O						S	X		O
Locker Rooms	X				O			X	S			X	
Nursing Homes			X		O			X		S		X	S ₄
Offices/Conference Rooms			X					S	X			X	
Pathology Laboratory		S	X	O	X			X		S		X	S ₄
Photographic Laboratory		X	X	X	O			X	S			X	
Restaurant/Food Odors			X	O	O			X	S			X	
Soldering & Brazing		X	X	X				X		S		O	
Tobacco Smoke (heavy)	X		S		X			X		S		X	
Tobacco Smoke (light)		X	X					X		S		X	
Vehicle Emissions		X	X	X	X			X	S			O	
Veterinary Hospital	X			O	O					X	S	X	S ₄

- Recommended X Notes: 1) MC-8836E includes BC-700. BC-700 is available by special order subject to minimum quantity.
 Optional (Addition) O 2) Consult Sales Dept. for recommendation based on chemicals in use.
 Optional (Substitution) S 3) This application excludes infectious disease control.
 4) UV "C" may be substituted for Bi-polar Ionization.
 5) MC-880 available with UV in place of Bi-polar Ionization and installed upstream of Stage IV.

*The recommendations listed above represent the manufacturer's best estimate of application requirements based on prior experience. Certain applications may require additional filtration depending on the contaminants present and their concentration. Consult your factory authorized representative or Sales Department for additional information.

FILTER REFERENCE GUIDE

Part No.	Description
MC-8811C	2 in. Pleated MERV 8
MC-8813A	1 in. 3-Ply Panel MERV 7
MC-8813B	1 in. 4-Ply Panel MERV 8
MC-8815	4 in. Mini-pleat 95% DOP/HEPA Type
MC-8821	4 in. Mini-pleat 99.97% HEPA
MC-8826	4 in. Pleated MERV 7
MC-8827A	4 in. Extended Surface MERV 14
MC-8827B	4 in. Pleated MERV 13
MC-8827C	4 in. Extended Surface MERV 11
MC-8836C	2 in. Throw-away Media Filter with BC-400
MC-8836D	2 in. Throw-away Media Filter with BS-100XL
MC-8836E	2 in. Throw-away Media Filter with BC-700

- Notes:
 1. MC-8811A or MC-8813A may be used in Stage I as prefilters.
 2. MC-8836 maybe used as an intermediate filter in Stage II and III.
 3. MC-8836E is a special order filter subject to minimum quantities.

SUGGESTED GUIDE SYSTEM SPECIFICATION

The Air Purification System shall be self-contained, flush mounted for installation into a standard "T" Bar ceiling grid and include all required filter elements, Bi-polar Ionization (UV "C") elements, blower assembly and controls required for the application. The System shall be capable of effectively controlling the gas and particulate phase contaminants normally found in a _____(application). The process shall include progressive density fibrous filters with a final efficiency of MERV _____ASHRAE 52.2/ _____% DOP; Bi-polar Ionization/UV "C"; and _____ gas filter media enclosed in honeycomb throw away panels. The cabinet shall be constructed from Type 5052 Aluminum sheet, assembled with rivets and lined with one inch accoustical foam. Seal all metal to metal surfaces with silicone sealant. The Air Purification System shall deliver _____ cfm with all filters installed. Input electrical service shall be 115Volts, 1 phase, 60 Hz.