

Topnotch Filtering Capabilities

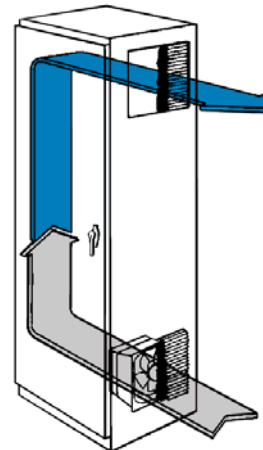
ProAir™ Filter Fan Packages are designed for applications where the filtered ambient air is acceptable to be drawn into the enclosure, humidity is not a factor and electronic controls can operate at a temperature differential slightly above the ambient.

The filter fan package is mounted on any side of the enclosure at the lowest possible position, while the exhaust grille kit is located on any side of the enclosure at the highest possible position. The filter fan draws cooler ambient air into the enclosure. The ambient air absorbs the heat from inside the enclosure and is then discharged through the exhaust grille.

The filter fan package and exhaust grille kit both use a dense fiber filter, as opposed to a customary wire mesh filter. This offers topnotch protection because the dense fiber filter does not allow dust, dirt or oil mist to enter the enclosure. The density of the filter also allows the filter fan package and exhaust grille to create positive pressure of filtered air inside the enclosure which eliminates unfiltered ambient air from being drawn into the enclosure through poorly sealed doors, panels and wireways.

FEATURES:

- Simple, snap-in mounting.
- Slim fan grille protrudes only .25" or less from enclosure mount.
- Attractive, cost effective alternative to closed-loop cooling in less hostile environments.
- Enclosure is pressurized with densely filtered, ambient air, locking out unfiltered air.
- Maintains IP54 rating (protects internal electronics from dust, foreign bodies, and splashing water) when used with special sealing gasket and higher density filter mat (ordered separately).
- Snap-on grille makes high density, washable filter very accessible.
- Easy installation with full-size mounting template. Mounting hardware, drawings and instructions furnished.
- All Filter Fan Packages and Exhaust Grille Kits are in stock.
- Fan motors are CSA certified and UL recognized.
- Exhaust Grille Kits are available with each Filter Fan Package, but must be ordered separately.



McLean Filtered Cooling

The filter fan package draws filtered ambient air into the enclosure; this pressurizes the enclosure with clean filtered air, locking out unfiltered ambient air. The air is then blown out the filter exhaust grille to maintain continuous airflow through the enclosure. This system cools the electronics and prevents shutdowns caused by heat.

PROAIR™ FILTER FANS SELECTION GUIDE

Step #1

Determine the internal heat load in Watts.

Help Note: 1 Watt = 3.413 BTU/Hr.

Step #2

Determine the ΔT (in °F), which is the temperature difference between the maximum temperature outside the enclosure (T_o) and the maximum allowable temperature inside the enclosure (T_i)
 $T_i - T_o = \Delta T$

Help Note: $1^\circ K \Delta T = 1.8^\circ F \Delta T$

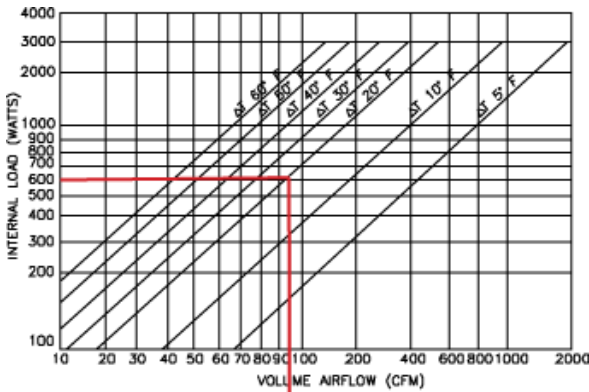
Step #3

Plot your application on the tables provided:

- Find your internal heat load in Watts on the vertical scale.
- Draw a horizontal line to the point of intersection with the diagonal line representing your ΔT .
- From that point, extend a vertical line down to the horizontal scale to determine your CFM requirement.
- Continue the vertical line to the table to identify applicable filter fan package(s).

Step #4

Select the filter fan package and exhaust grille kit, which best fits the application.



SERIES	WITH 1 EXHAUST GRILLE KIT	UNRESTRICTED AIR FLOW AT 60Hz
SF-05	29 CFM	39 CFM
SF-09	57 CFM	75 CFM
SF-10	126 CFM	162 CFM
SF-13	250 CFM	376 CFM

NOTE: CFM is reduced 10% on 50Hz operation.

EXAMPLE

An application enclosure generates 600 Watts of internal heat. Maximum temperature inside this enclosure is 105°F and the maximum temperature outside this enclosure is 85°F.
 (The orange line on the tables corresponds to this example.)

Step #1: 600 Watts

Step #2: 105°F - 85°F = 20°F ΔT

Step #3: Plot application per instructions.

Step #4: Select the best combination of filter fan package(s) and exhaust grille kit(s).

Alternate Method of Selection

- Choose a specific filter fan package.
- Draw a vertical line up from the filter fan package selected.
- Draw a horizontal line from the internal heat load in Watts.
- The point of intersection is the approximate ΔT (difference in temperature) that will be achieved using the specific filter fan package.

HOW TO READ MODEL NUMBERS

SF-05 1 6-001

1 2 3 4 5

- Filter fan.
- Approximate size of fan frame (i.e. 05 = 5").
- 1 = 115 Volt, or 2 = 230 Volt.
- 6 = 50/60 Hz.
- Standard model.

SG-0500-001

1 2 3

- Exhaust grille kit.
- Approximate size of fan frame (i.e. 05 = 5").
- Standard model.

PROAIR SERIES SF-05 FILTER FAN PACKAGE

39 CFM (66M3/HR)

HxWxD: 5.83" (148) x 5.83" (148) x 2.76" (70)

Model Number	Voltage	Hz	Phase	Full Load Amps	Motor RPM	Service Temperature		Noise dB(A)	Shipping Weight Lbs/Kg	Exhaust Grille Kit* Model No.	Airflow (CFM)	
						Low °F/°C	High °F/°C				Free Air**	With I Exhaust Grille Kit
SF-0516-001	STOCK 115	50/60	1	0.22	2650/3100	14/-10	131/55	42	1.87/0.85	SG-0500-001	39	29
SF-0526-001	STOCK 230	50/60	1	0.11	2650/3100	14/-10	131/55	42	1.87/0.85	SG-0500-001	39	29

PROAIR SERIES SF-09 FILTER FAN PACKAGE

75 CFM (127M3/HR)

HxWxD: 8.03" (204) x 8.03" (204) x 3.78" (96)

Model Number	Voltage	Hz	Phase	Full Load Amps	Motor RPM	Service Temperature		Noise dB(A)	Shipping Weight Lbs/Kg	Exhaust Grille Kit* Model No.	Airflow (CFM)	
						Low °F/°C	High °F/°C				Free Air**	With I Exhaust Grille Kit
SF-0916-001	STOCK 115	50/60	1	0.22	2650/3100	14/-10	131/55	51	2.56/1.16	SG-0900-001	75	57
SF-0926-001	STOCK 230	50/60	1	0.11	2650/3100	14/-10	131/55	51	2.56/1.16	SG-0900-001	75	57

PROAIR SERIES SF-10 FILTER FAN PACKAGE

162 CFM (275M3/HR)

HxWxD: 9.84" (250) x 9.84" (250) x 5.20" (132)

Model Number	Voltage	Hz	Phase	Full Load Amps	Motor RPM	Service Temperature		Noise dB(A)	Shipping Weight Lbs/Kg	Exhaust Grille Kit* Model No.	Airflow (CFM)	
						Low °F/°C	High °F/°C				Free Air**	With I Exhaust Grille Kit
SF-1016-001	STOCK 115	50/60	1	0.53	2760/3030	14/-10	131/55	52	4.39/1.99	SG-1000-001	162	126
SF-1026-001	STOCK 230	50/60	1	0.3	2760/3030	14/-10	131/55	52	4.39/1.99	SG-1000-001	162	126

PROAIR SERIES SF-13 FILTER FAN PACKAGE

376 CFM (638M3/HR)

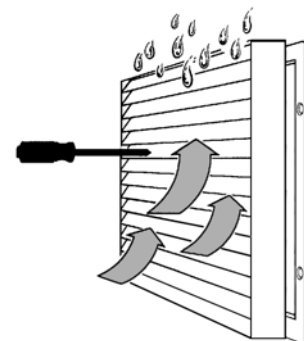
HxWxD: 12.72" (323) x 12.72" (323) x 6.09" (155)

Model Number	Voltage	Hz	Phase	Full Load Amps	Motor RPM	Service Temperature		Noise dB(A)	Shipping Weight Lbs/Kg	Exhaust Grille Kit* Model No.	Airflow (CFM)	
						Low °F/°C	High °F/°C				Free Air**	With I Exhaust Grille Kit
SF-1316-001	STOCK 115	50/60	1	0.89	2550/2800	14/-10	131/55	61	8.38/3.80	SG-1300-001	376	250
SF-1326-001	STOCK 230	50/60	1	0.45	2550/2800	14/-10	131/55	61	8.38/3.80	SG-1300-001	376	250

OPTIONAL THERMOSTAT



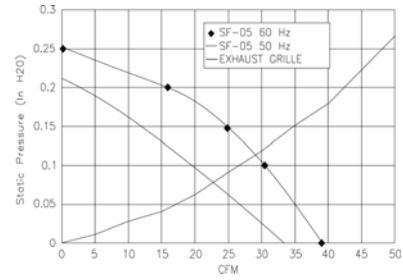
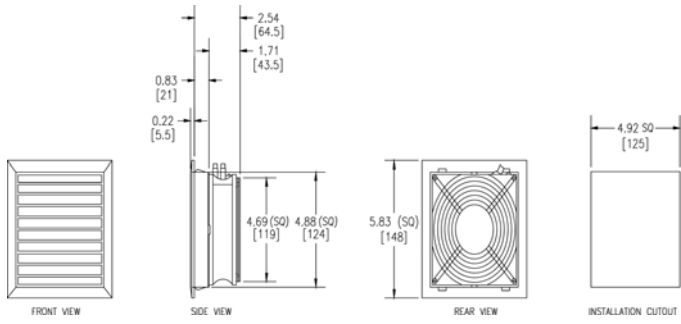
- To be ordered separately and installed by customer.
- The thermostat can be used to control temperature by turning the fan on and off. Or it can be used to send a signal to a customer-specified alarm for high temperature or dirty filter conditions.



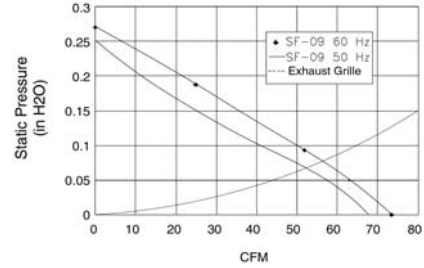
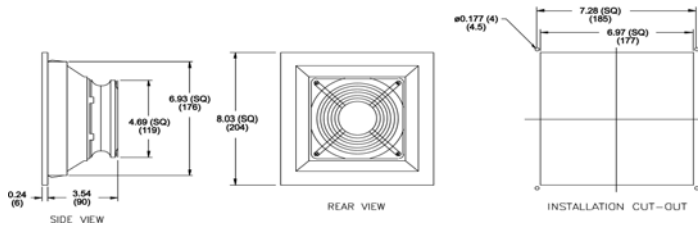
Added Protection

With the addition of a filter sealing gasket and higher density filter mat, installed on both the filter fan package and the exhaust grille kit, an IP54 rating can be maintained according to DIN 40050. This rating is defined as protecting internal electronics from dust, foreign bodies and splashing water.

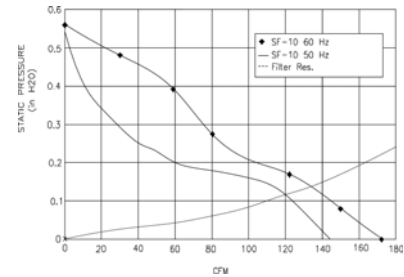
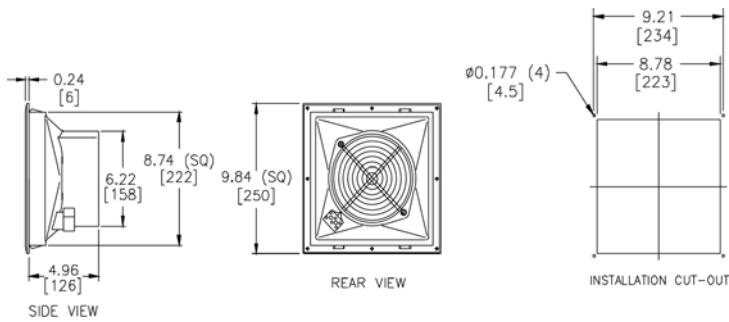
SF-05



SF-09



SF-10



SF-13

