

Blowers and Fans

General Selection Considerations

General Specifications

All Hammond blowers and filter fans are engineered for performance and built for reliability. This versatile line includes a blower, fan tray and filter fans.

Blowers and fans use forced convection cooling, which means ambient air flows through a filter into the enclosure to cool heated components. Both blowers and fans are sized in CFM (cubic feet per minute).

It is recommended that an exhaust filter be used in combination with the blower or filter fan to act both as an exhaust point for the hot internal air plus aid in the pressurization of the enclosure, reducing the chance of unfiltered air entering the enclosure. Whenever possible, the blower or filter fan should be located in the bottom third of the enclosure and the filtered exhaust grill placed as high as possible on the opposing side. Performance levels can be further increased by adding a second exhaust filter.

Sizing Blowers and Fans

To determine the CFM (cubic feet per minute) required in any standard situation, use the following calculation, (non-standard situations would consist of high air density - significantly more than 0.075 lbs per cubic foot.)

$$CFM = \frac{\text{Power to be dissipated (Watts)} \times 3.17}{\text{Maximum Allowable Internal Temperature (°F)} - \text{Maximum Ambient Temperature (°F)}}$$

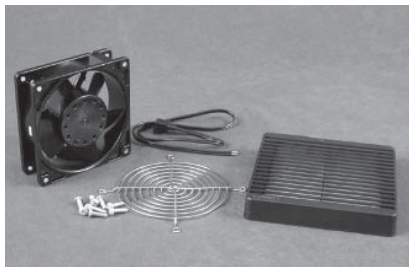
Note - The calculation above is exact, but adding an additional 25% to the CFM level is a standard safety factor.

If the air density is high (significantly more than 0.075 lbs per cubic foot), use the number calculated above in the following formula:

$$\frac{CFM \times (0.075)}{\text{Non-standard Air Density (lbs per cubic foot)}}$$

Note: Ambient Temperature must be lower than maximum internal temperature for fan/blower to be effective.

Filter Fan Kits



- Easy to order kit - one part number (save time & cost)
- Kit includes: Fan, plastic filter grill, filter, metal grill, cord & mounting hardware (as shown).
- Flame retardant, ABS plastic filter fan grill is molded in a choice of four colors to match our racks & accessories. "BK" (Black), "CG" (Gray/Beige - RAL7032), "GY" (ANSI 61 Gray) or "LG" (Light Gray - RAL7035).

115 VAC (50/60 Hz)

Part Number	Fan Size	Fan CFM	Cord	Filter Grill Color
DNFF080BK115	3.15" (80mm)	32	11" leads	Black
DNFF080CG115	3.15" (80mm)	32	11" leads	Gray/Beige
DNFF080GY115	3.15" (80mm)	32	11" leads	ANSI Gray
DNFF080LG115	3.15" (80mm)	32	11" leads	Light Gray
DNFF120BK115	4.7" (120mm)	105	24" cord	Black
DNFF120CG115	4.7" (120mm)	105	24" cord	Gray/Beige
DNFF120GY115	4.7" (120mm)	105	24" cord	ANSI Gray
DNFF120LG115	4.7" (120mm)	105	24" cord	Light Gray

230 VAC (50/60 Hz)

Part Number	Fan Size	Fan CFM	Cord	Filter Grill Color
DNFF080BK230	3.15" (80mm)	32	11" leads	Black
DNFF080CG230	3.15" (80mm)	32	11" leads	Gray/Beige
DNFF080GY230	3.15" (80mm)	32	11" leads	ANSI Gray
DNFF080LG230	3.15" (80mm)	32	11" leads	Light Gray
DNFF120BK230	4.7" (120mm)	105	24" cord	Black
DNFF120CG230	4.7" (120mm)	105	24" cord	Gray/Beige
DNFF120GY230	4.7" (120mm)	105	24" cord	ANSI Gray
DNFF120LG230	4.7" (120mm)	105	24" cord	Light Gray

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

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