

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.)

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

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:

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

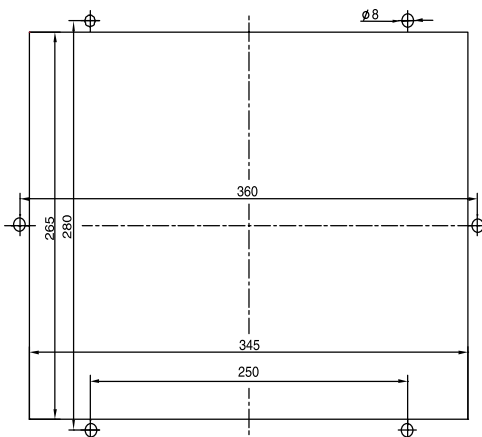
Note: Ambient Temperature must be lower than maximum internal temperature for fan/blower to be effective.



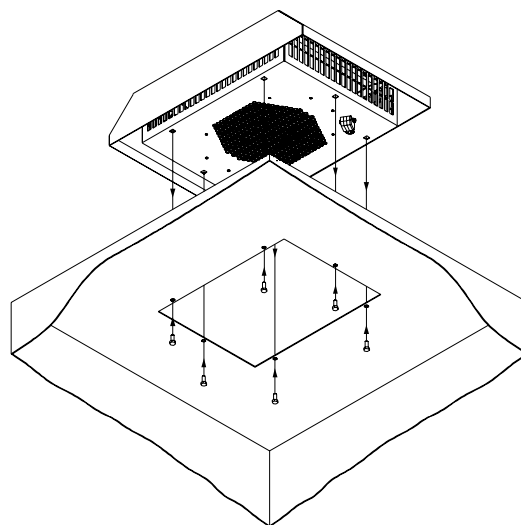
Top Mount Fan

- Mounts to top of enclosure.
- Ideal for use with IME Series (not compatible with 400mm deep IMET cabinets).
- 470 CFM free flow, 375 CFM using PFA6000 as inlet.
- 115V 50/60Hz
- Terminal block connection.
- 20.9" x 13.8" x 4.3"H
- UL/cUL Approved.
- Gasket seal- IP33 ingress protection level.
- Finished in RAL7032 beige.

Part No. **PTF8000**



Cutout Template
(dimensions in mm)



Climate Control

Fan Panels

- Create your own rack mount fan or filter fan from these panels.
- Black powder coated steel.
- Also available in 24" and other widths or custom configurations.
- Fans sold separately



19" Grill Panel Shown

Punched 19" Fan Panels

| Part No. | Panel Size | Cutouts for Stnd. Fans | # Holes | Optional Fan Part No. (115V) | Optional Fan Guard Grill | Optional Filter Grill (Black) | Optional Replacement Filter (pkg. 5) |
|---------------|------------|------------------------|---------|------------------------------|--------------------------|-------------------------------|--------------------------------------|
| PPFP190802BK1 | 3U | 80mm/3.15" | 2 | FAN80AC115 | FAN80FG | XPFA80BK | PFF1000 |
| PPFP190803BK1 | 3U | 80mm/3.15" | 3 | FAN80AC115 | FAN80FG | XPFA80BK | PFF1000 |
| PPFP191202BK1 | 4U | 120mm/4.70" | 2 | DNMF100AC115 | DNFG | XPFA120BK | PFF2000 |

Punched 19" Grill Panels (with integral front finger guard)

| | | | | | | | |
|---------------|----|-------------|---|--------------|------|---|---|
| PPGP191202BK1 | 3U | 120mm/4.70" | 2 | DNMF100AC115 | DNFG | - | - |
|---------------|----|-------------|---|--------------|------|---|---|