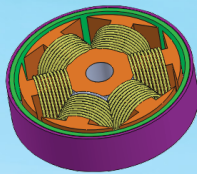


Single-Phase
Pole: Slot=1:1



3-Phase
Pole: Slot=2:3 or 4:3

Three-Phase Brushless DC Motor Fans

Designed for data center and storage servers, Delta's three-phase brushless DC motor fans represent the next stage in advancement of server cooling fans. Three-phase motors provide a stable transition between slots, which allow fans to run smoothly while maintaining low vibration, high air pressure, and high energy efficiency, resulting in energy and cost savings.

Delta's three-phase fans deliver a variety of advantages:

- High Efficiency
- Lower Rotating Vibration
- Optimized Blade Design
- Advanced FET's /Drivers for lower start up voltage and ripple current

Web: www.delta-fan.com

Email: dcfansales.us@deltaww.com



Three-Phase Brushless DC Motor Fans

Data center and server cooling fans demand high energy efficiency and low rotating vibration to achieve thermal requirements and operating performance. Delta three-phase motor brushless DC fans integrate optimized blade design and advanced electrical drives to achieve high operating efficiency (up to 40%) and low vibration.

Powered by three-phase motors and advanced electrical drives

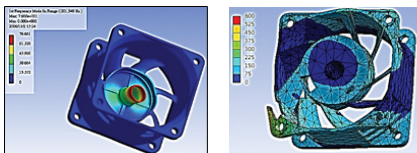
Advance electrical drive technology to lower start-up noise and ripple current.

Optimized blade design for high efficiency

New series fans can reach up to 40% efficiency.

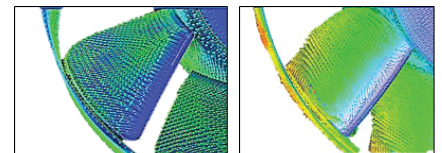
The core technologies of Delta's three-phase brushless DC fans are:

Enhanced Structure



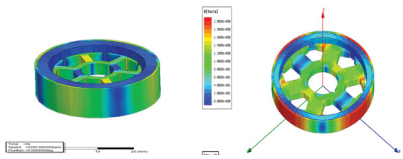
Advanced CAE Analysis in structure design

High Efficiency Blade



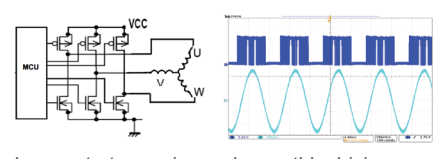
Aerodynamic simulation to smooth airflow

Three-phase Motor

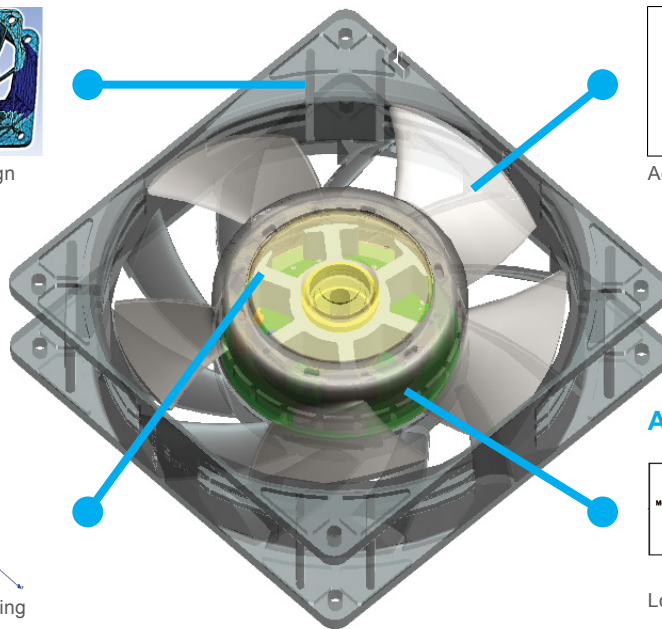


New motor shape to smooth motor switching

Advanced Electrical Drive



Lower start-up noise and smoothly driving



Available Models

| Part Number | Dimension (mm) | Operating Voltage Range (VDC) | Voltage (VDC) | Bearing Type | Current (A) | Power (W) | Speed (RPM) | Noise (dB-A) | Air Flow (CFM) | Air Pressure (in H2O) |
|-------------------|----------------|-------------------------------|---------------|--------------|-------------|-----------|-------------|--------------|----------------|-----------------------|
| GFM0412SS-DE1PB7Q | 40x40x56 | 10.8~12.6 | 12V | Ball | 1.1 | 13.2 | 19000/19250 | 68.5 | 21.56 | 3.416 |
| PFM0612XHEB7T | 60x60x38 | 10.8~12.6 | 12V | Ball | 1.15 | 13.8 | 18500 | 65.1 | 64.44 | 2.343 |
| PFM0812HE-01BFY | 80x80x38 | 10.8~12.6 | 12V | Ball | 4.3 | 51.6 | 16300 | 77 | 129.42 | 4.969 |
| GFM0812DS-SMB7R | 80x80x56 | 10.8~12.6 | 12V | Ball | 2.4 | 28.8 | 12500/11000 | 73.3 | 93.23 | 4.485 |
| GFC0812DW-SM00B7P | 80x80x80 | 10.8~12.6 | 12V | Ball | 5.2 | 62.4 | 12000/10500 | 74.5 | 167.02 | 4.17 |
| GFM0812DUB7S | 80x80x86 | 10.8~12.6 | 12V | Ball | 9 | 108 | 13800/13200 | 82.5 | 190.63 | 5.749 |
| PFM1412DEB7V | 140x140x38 | 10.8~12.8 | 12V | Ball | 3.9 | 46.8 | 6500 | 70 | 282.31 | 2.033 |