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

DELTA

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

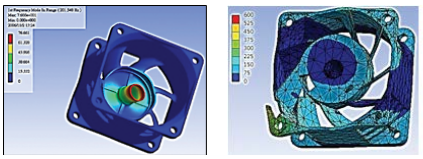
Advance electrical drive technology to lower start-up noise and ripple current.

Optimized blade design for high efficiency

New series fans can reach up to 40% efficiency.

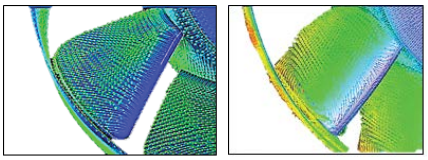
The core technologies of Delta's three-phase brushless DC fans are:

Enhanced Structure

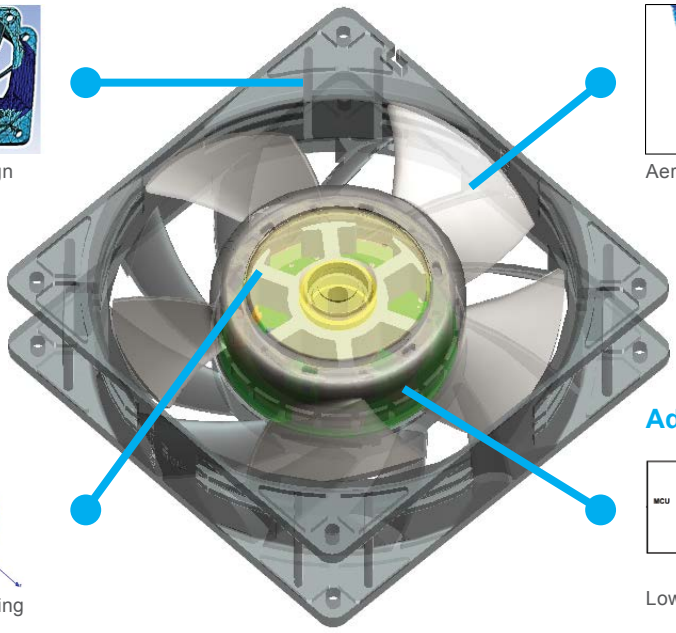


Advanced CAE Analysis in structure design

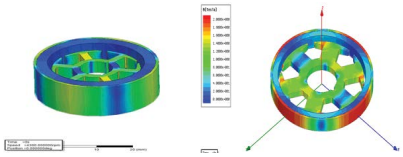
High Efficiency Blade



Aerodynamic simulation to smooth airflow

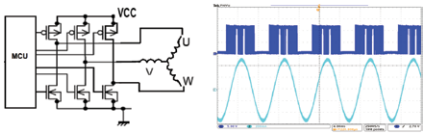


Three-phase Motor



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