

# Maximize Efficiency with Minimal Resources

Infinitum stands at the forefront of fan OEM supply, prioritizing customer needs with superior solutions that reduce energy consumption, simplify installation processes, and enhance dependability—all while contributing to environmental sustainability.





### **Enhancing Energy Efficiency**

In the realm of industry, efficiency isn't just a goal—it's a necessity. Infinitum's Aircore EC motors redefine excellence in HVACR efficiency, aligning with the sector's environmental ambitions. By leveraging precisely etched PCB stators, we eliminate the eddy currents and losses typical in traditional motors with iron core stators and copper windings, boosting efficiency by over 10% under partial loads.

Designed for direct mounting to fan systems, Aircore EC motors surpass traditional models by 10-15% in efficiency. Their variable speed capabilities ensure energy savings during low-demand periods, optimizing Power Usage Effectiveness (PUE) and reducing energy expenses.





# Speed your time-to-market with our motors

**Shipping now** 

**Lifecycle Services Team** 



## Streamlined Installation and Maintenance

Our compact, ready-to-install units arrive fully assembled, requiring less space and easing the transportation and installation process.

The innovative design of the modular Aircore EC motors allows for easy disassembly, providing motor repair technicians direct access to any faulty components. This modularity not only facilitates on-site part replacement, significantly cutting down motor failure costs and downtime but also enables customization to meet specific application needs and simplifies servicing and refurbishment.

Infinitum's approach minimizes downtime, extends the cooling system's lifespan, and delivers an impressive total cost of ownership (TCO).



### **Unmatched Reliability**

The core of Infinitum motors, the PCB stator, ensures a durable and reliable magnetic field, outlasting traditional motors by an average of ten times. Each component—from stator windings to bearings, a frequent failure point in motors—is optimized for longevity. Infinitum motors are equipped with steel bearings by default, with the option for hybrid ceramic bearings, ensuring a 50,000-hour L10 bearing life across all orientations.



### **Noise and Vibration Reduction**

Infinitum's pioneering PCB stator technology significantly reduces acoustic noise and torque ripple. The absence of traditional magnetic forces and an iron core stator ensures smoother operation, offering up to 3 dB lower sound power noise across all frequencies for a quieter environment.



## **Commitment to Sustainability**

The innovative design of PCB Stator motors requires up to 60% fewer materials and 70% less copper, minimizing the environmental footprint of production. Our sustainable, circular design philosophy extends the lifecycle of each motor component, promoting reuse and recycling.

By focusing on refurbishment and remanufacturing, we not only recycle but also enhance the lifespan of our motors. This process involves disassembling the product, assessing each part, and replacing worn components with modern equivalents, thereby maintaining reliability while conserving energy and reducing waste.

