

## IEh Series™ Motor & Controller

### POWERING THE ELECTRIC REVOLUTION

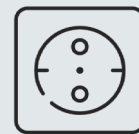
Infinitum Electric's IEh Series utilizes our innovative printed circuit board stator technology to deliver premium performance for quieter, more efficient consumer appliances.



**Ultra-High Efficiency**



**Low Acoustic Noise**



**Compact and Lightweight**



**Durable**



**High Operating Speed**



**Low Vibration**

### CUSTOMIZABLE SPECIFICATIONS

#### SOUND

< 45 dB

#### SPEED

0 - 110,000 RPM

#### VIBRATION

< 0.25 mm/sec

#### EFFICIENCY

> 90% for any power  
rating



# IEh SERIES™ MOTOR & CONTROLLER

## POWERING THE ELECTRIC REVOLUTION



### Ultra-High Efficiency

Stator core losses are eliminated due to the coreless construction, and the eddy current losses in the rotor and magnets are negligible. This contributes to IEh being highly efficient over a wider range of load conditions.



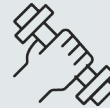
### Low Acoustic Noise

The IEh motor is one of the quietest on the market. There's no cogging torque and no magnetic force between the rotor and stator to cause magnetic noise, leading to a dramatically quieter motor.



### Compact and Lightweight

Infinitum Electric's printed circuit board stator produces the same power rating as an iron core stator, for 10% of the weight. With high energy product magnets, the overall motor volume is reduced to approximately one third the volume of a conventional iron core motor.



### Durable

The IEh is exceptionally durable, thanks to the printed circuit board stator with a 10x longer life than conventional coils. The uniform silicon stator temp distribution prevents thermal stresses on windings, and there is no magnetic force to induce stator mechanical pulsation and fatigue.



### High Operating Speed

IEh can be engineered for high operating speed, featuring magnet containment that is not in the way of magnetic flux, a coreless construction allowing for high frequency operation without efficiency penalties caused by core losses, and a simple rotor construction to ensure stability at high speeds.



### Low Vibration

The simple structure of the IEh motor's rotors prevents them from shifting due to thermal or mechanical stresses. The lack of magnetic force between the stator and the rotors eliminates magnetic induced mechanical vibrations.

***Infinitum Electric re-engineers critical aspects of traditional motor technology, helping customers gain a competitive advantage with differentiated products that decrease carbon footprint and improve performance, reliability, and cost.***



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