

Aircore EC Integrated Motor & Drive

Designed to go beyond

Using our innovative PCB stator technology, Aircore EC motors offer class-leading efficiency in a package that is 50 percent lighter and smaller than a traditional iron core motor. The Aircore EC provides the market's most comprehensive range of power and frame sizes along with IoT capabilities, bringing smart motor technology to a wide range of HVAC and industrial applications.

66% Less Copper 50% Less Weight & Size 30% Fewer Emissions





Light and powerful

Our lightweight durable materials generate the same amount of power as a traditional iron core motor in a package that is 50 percent lighter and smaller. The PCB stator maximizes power density by combining low-volume, high-energy product magnets and direct coil cooling, providing two to three times the current density of a conventional motor.



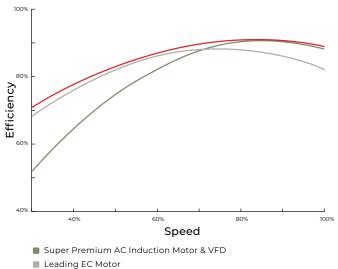
Reliable and durable

By eliminating common points of failure associated with copper windings and insulation in traditional motors, our PCB stator has proven to be up to 9x more reliable in thirdparty testing. Our programmable software provides direct control over operational perimeters improving reliability with real-time data monitoring of critical equipment.



Aircore EC motors are built with a copper-etched PCB stator instead of a traditional iron core and copper windings. This design increases efficiency by eliminating high-loss eddy currents. Our motors are smaller and lighter, making it possible to mount the motor directly to the fan, which increases efficiency by 10 to 15 percent.

Aircore EC Motor Efficiency



Infinitum Aircore EC Motor

Horse Power (HP)	Λ			Available	upon request
0 L 500	1500	2500	3500	4000	4500

Speed (RPM)

Catalog Number	Power hp/kW	Speed (RPM)	Diameter (in/cm)	Motor + Drive Length (in/cm)	Motor + Drive Weight (lb/kg)
IEs205-15-3600-460-C	15 / 11.19	3600	20.2in / 51.3cm	8.9in / 22.6cm	160lb / 72.6kg
IEs205-15-2400-460-C	15 / 11.19	2400	20.2in / 51.3cm	8.9in / 22.6cm	160lb / 72.6kg
IEs205-10-1800-460-C	10 / 7.46	1800	20.2in / 51.3cm	8.9in / 22.6cm	160lb / 72.6kg
IEs180-10-3600-460-C	10 / 7.46	3600	17.9in / 45.5cm	8.6in / 15.2cm	115ıb / 52.2kg
IEs180-10-2400-460-C	10 / 7.46	2400	17.9in / 45.5cm	8.6in / 15.2cm	115ıb / 52.2kg
IEs180-7.5-1800-460-C	7.5 / 5.59	1800	17.9in / 45.5cm	8.6in / 15.2cm	115ıb / 52.2kg
IEs150-7.5-3600-460-C	7.5 / 5.59	3600	15.9in / 40.4cm	9.4in / 23.9cm	93lb / 42.2kg
IEs150-7.5-2400-460-C	7.5 / 5.59	2400	15.9in/40.4cm	9.4in / 23.9cm	93lb / 42.2kg
IEs150-5-2400-460-C	5 / 3.73	2400	15.9in/40.4cm	9.4in / 23.9cm	93lb / 42.2kg
IEs150-5-1800-460-C	5 / 3.73	1800	15.9in/40.4cm	9.4in / 23.9cm	93lb / 42.2kg
IEs1305-4200-460-C	5 / 3.73	4200	14.0in / 35.6cm	9.2in / 23.4cm	79lb / 35.8kg
IEs1305-3600-460-C	5 / 3.73	3600	14.0in / 35.6cm	9.2in / 23.4cm	79ıb / 35.8kg

Electrical Specifications

Voltage	460VAC(±10%), 3Φ	
Input Frequency	60 Hz	
Analog References	0-10 V, 0-20 mA	
Digital Inputs	24 VDC	

Mechanical Specifications

Enclosure	TEFC/IP54	
Mounting	Frame, C-Face	
Relative Humidity	95% non-condensing	
Maximum Elevation	Up to 1000m De-rate above 1000m	

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Aircore EC Motor Operation Range