

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





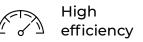
Light and powerful

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.



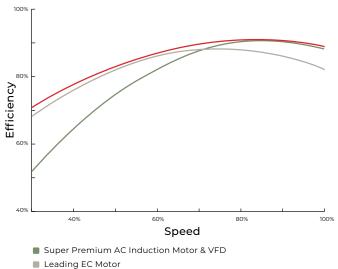
Reliable and durable

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 | |

- 106 Old Settlers Blvd
 Suite D106
 Round Rock, TX 78664
- info@goinfinitum.com
 goinfinitum.com
 support.goinfinitum.com





Aircore EC Motor Operation Range