

Aircore EC

Designed to go beyond

Motor and drive all in one

Integrated variable frequency drive (VFD) facilitates variable speed applications, reducing overall energy usage.

Power more with less

The Aircore EC's reduced size and weight unlock infinite design potential making any machine lighter, quieter, and more efficient.



66% Less copper

50% Less weight

30% Less noise

25%* More efficient

Using our innovative PC stator technology, Aircore EC motors offer class-leading efficiency in a smaller package. 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.



Powerful intelligence

- State-of-the-art VFD for precise speed control which contributes to energy and audible noise reduction.
- I-con motor control software enables users to fine tune operational parameters to their specific applications.
- Maximum power density in a 50% smaller and lighter package.



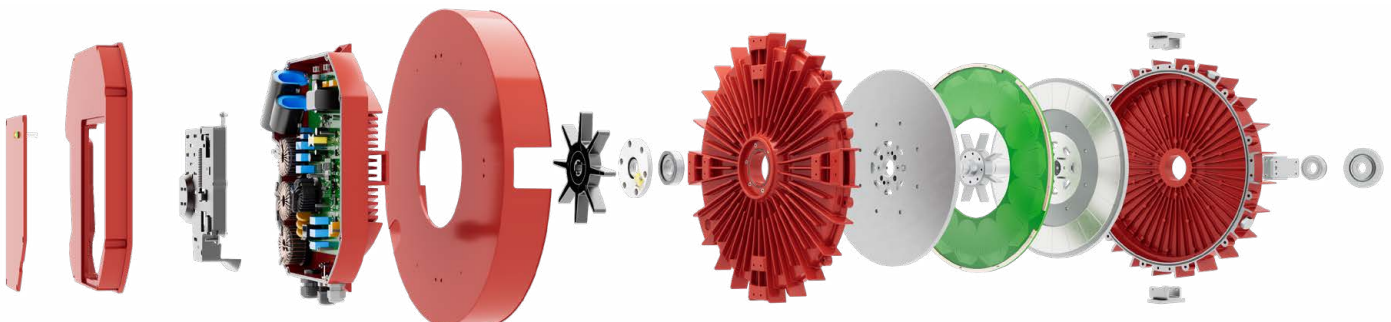
Optimized efficiency

- Meets highest efficiency standards at a wide range of operating conditions.
- Increased operational efficiency by eliminating torque ripple, cogging, stator hysteresis and eddy current losses.
- Compact form factor reduces wiring and facilitates direct mounting to fan applications, increasing efficiency by up to 25% compared to a traditional motor.



Sustainable solutions

- Our PCB stator uses 66% less copper and is 10x more reliable than traditional iron-core, copper-wound stators.
- Enhanced serviceability due to modular design enables the reuse and extended lifespan of components, keeping them out of the landfill.
- Increased efficiency reduces customer's scope 2 emissions by up to 25%.





Applications

Driving efficient fans

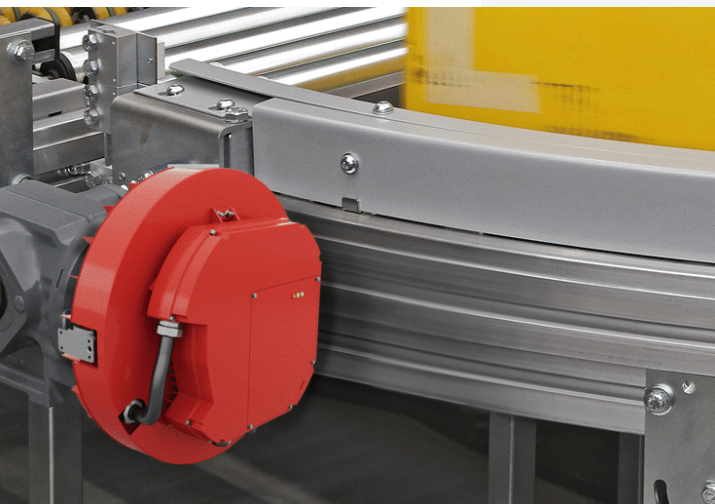
Aircore EC motors offer a remarkable advantage over traditional iron core motors as they are smaller, lighter, and enable direct mounting on the fan. This advancement allows original equipment manufacturers (OEMs) to create more compact systems that boast enhanced efficiency. By utilizing our motors, applications like fan arrays become much simpler to ship, install, and maintain.

Our motors come equipped with a VFD, granting you optimal operational control. Through this feature, you can effectively curtail energy costs by over 50 percent, a significant benefit that adds to the overall efficiency and eco-friendliness of the system.



Efficient, sustainable data center solutions designed with flexibility in mind

Infinitum's high efficiency motors and environmentally-forward technology support lower carbon emissions through modular design. Our circular design strategy is centered around reliability, serviceability, and remanufacturing.



Revolutionizing material handling

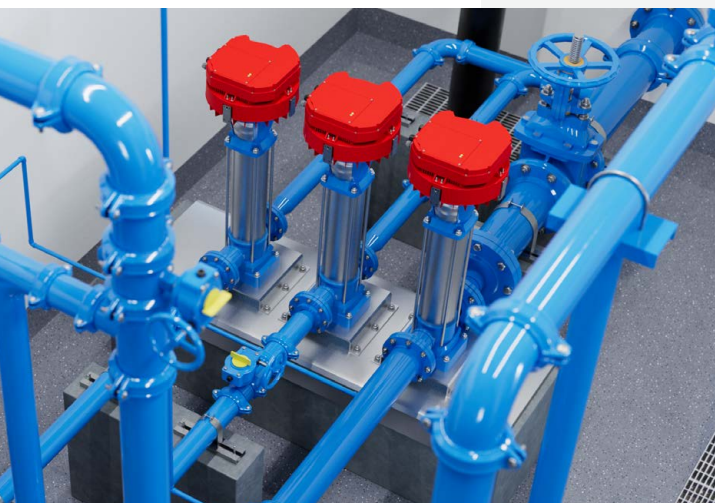
Offering exceptional performance and efficiency across a broad spectrum of operating speeds, Aircore EC motors are the ideal choice for industrial conveyor and materials handling applications requiring substantial torque and power at lower RPMs. With a remarkable ability to maintain reliability, our motors can operate seamlessly within a temperature range of -25°C to 40°C and under 95 percent relative humidity.

Designed to endure the demanding conditions often encountered in industrial settings, Infinitum motors are engineered to withstand rigorous operating conditions. Their robust construction guarantees long-lasting performance while significantly reducing the risk of mechanical failures.

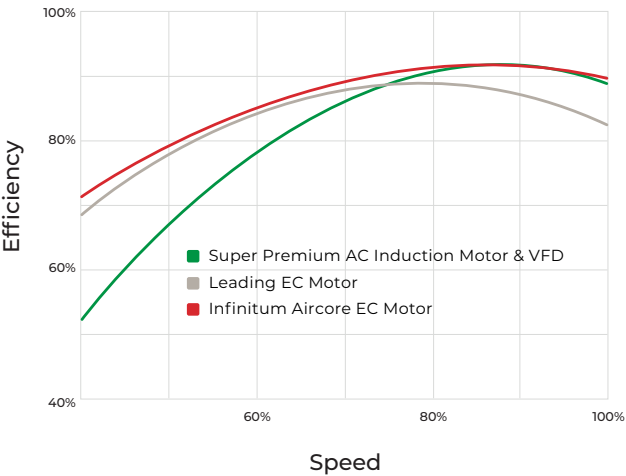
Maximize pump performance

In industrial and commercial settings, robust and reliable pumps are essential for tasks ranging from HVAC systems to water treatment facilities. Aircore EC motors are purposefully designed to meet the demands of these challenging environments, by providing exceptional durability and power. Our motors are equipped to resist dust ingress and water splashing, ensuring continuous operation even in harsh conditions.

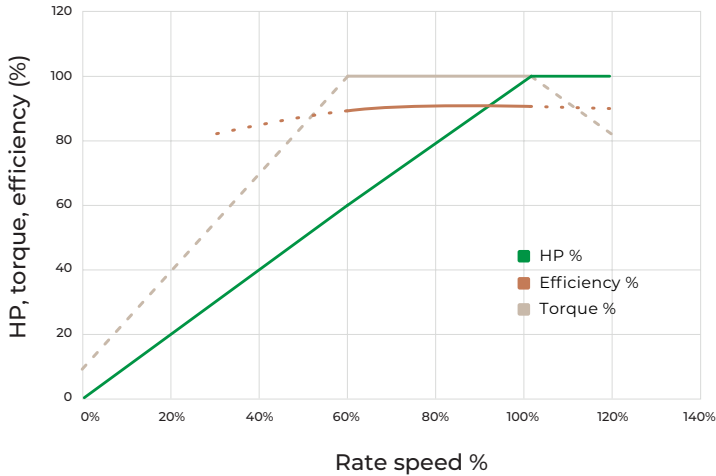
Additionally, the Aircore EC motors boast a compact and disc-like design, making them the ideal choice for applications with limited space, allowing for more flexible and versatile installation options.



Aircore EC motor efficiency



Aircore EC motor operation range



AE (Aircore EC) Family Catalog Number **XX-XX-XXXX-XXXX-XXXX**

Family	Frame	Rated Power	Rated Speed	Product Code Voltage	Product Code VFD and I/O	Product Code Reserved	Product Code Bearings	Product Code Shaft Length	Product Code Wireless	Product Code Enclosure	Product Code Grounding
XX	XX	XXXX	XXXX	X	X	X	X	X	X	X	X
AE	13 130 Frame	0590* +	1225 +	A 460V/60Hz	A MODBUS RTU	A None	S Steel	A 3.25"	A None	4 IP54	0 Grounded Wye
	15 150 Frame	0789* +	1800 +	B 415V/60Hz	B BACnet MS/TP		H Hybrid Ceramic		B Bluetooth	5 IP55	3 Delta/HRG
	18 180 Frame	1000* +	2400 +						C Cellular		
	20 205 Frame	1500* +	3600 +						W Wi-Fi		

*0590= 5.9 HP, 0789= 7.89 HP, 1000= 10 HP, 1500= 15 HP
+ More power and speed variations available

Electrical	
Voltage	460 VAC ± 10%, 415 VAC ± 10%, 575 VAC ± 10%
Input frequency	60 Hz
Analog references	0-10 V, 0-20 mA
Digital inputs	24 VDC
EIA-485 Interface for Modbus RTU or BACnet MS/TP	

Mechanical	
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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