

Aircore EC

# **Heavy Duty**

Designed to go beyond

### Motor and drive all in one

Integrated variable frequency drive (VFD) facilitates vertical-inline heavy duty applications, reducing overall energy usage.

66% Less copper

### Power more with less

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

50% Less weight and size



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 heavy duty applications.



### **Powerful** intelligence

- State-of-the-art VFD allows precise speed control, reduces energy usage, and operates at a frequency to minimize audible noise.
- · 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.
- · Configurable, with analog and digital inputs for pressure sensors, flow switches, etc.



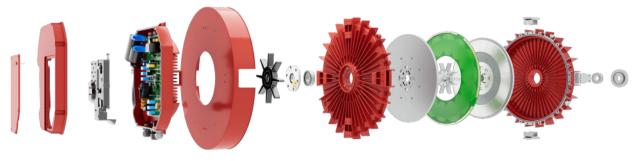
# Optimized efficiency

- · Meets highest efficiency standards at a wide range of load 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 pump applications, increasing efficiency by 10-15%.



### Sustainable solutions

- · PCB stator uses 66% less copper and has proven to be 10x more reliable than traditional iron-core, copper-wound stators.
- Smaller and lighter housing reduces transportation emissions by 30%.
- Easy serviceability through our modular design enables the reuse and extended lifespan of components, keeping them out of the landfill.



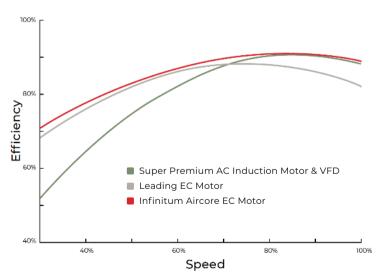




Catalog number	Power (HP/kW)	Speed (RPM)	Torque (Nm)	Diameter (in/cm)	Motor + drive length (in/cm)	Motor + drive weight (lb/kg)	NEMA frame	Bearing DE, NDE
AH18-1000-3600-AAAS-AA40 AH18-1000-3600-AAAH-AA40	10 / 7.46	3600	20	18.6in / 47.2cm	8.7in / 22.1cm	96.11b / 43.6kg	213/5TC	6308ZZ
AH18-0750-1800-AAAS-AA40 AH18-0750-1800-AAAH-AA40	7.5 / 5.59	1800	30	18.6in / 47.2cm	8.7in / 22.1cm	96.11b / 43.6kg	213/5TC	6308ZZ
AH15-0750-3600-AAAS-AA40 AH15-0750-3600-AAAH-AA40	7.5 / 5.59	3600	15	16.4in / 41.7cm	8.7in / 22.1cm	81.4lb / 36.9kg	213/5TC	6308ZZ
AH15-0500-1800-AAAS-AA40 AH15-0500-1800-AAAH-AA40	5/3.73	1800	20	16.4in / 41.7cm	8.7in / 22.1cm	81.4lb / 36.9kg	213/5TC	6308ZZ
AH13-0500-3600-AAAS-AA40 AH13-0500-3600-AAAH-AA40	5 / 3.73	3600	10	14.5in / 36.7cm	9.1in / 23.1cm	62.8lb / 28.5kg	182/4TC	6206ZZ

Note: The letters S and H in the catalog number indicate supported bearing types.

# Aircore EC motor efficiency



21/40/- 100/- 74
O VAC (± 10%), 3Φ
Hz
0 V, 0-20 mA
VDC
(

Mechanical					
Enclosure	TEFC/IP65				
Mounting	Frame, C-face				
Relative humidity	95% non-condensing				
Maximum elevation	Up to 1000m, de-rate above 1000m				
Bearing	Sealed, Shieleded, Steel, Hybrid				
Shaft diameter	1.375in / 4.492cm				



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