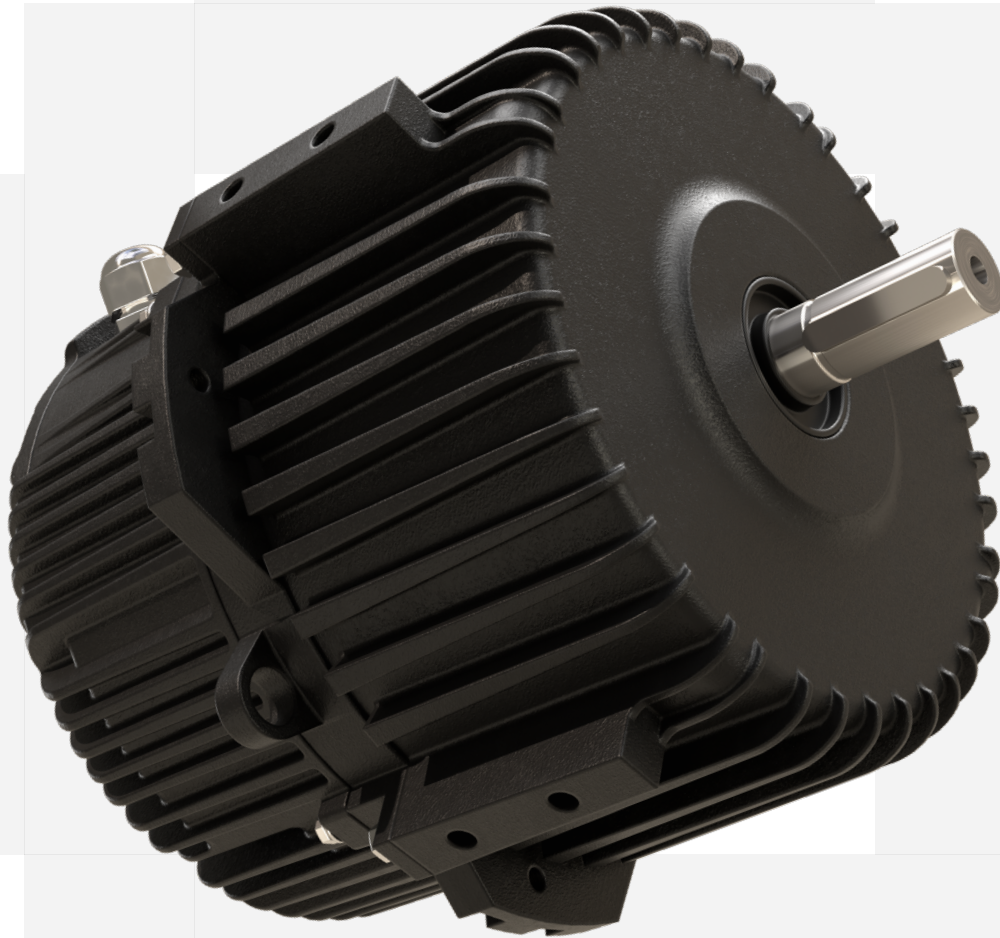


Hoyer EC Motors

Cut energy use in HVAC and industrial ventilation

Together
we outsmart
the ordinary

HOYER



Over 20% Energy Savings. Fast Payback Times.

We are a global supplier of energy-efficient electric motors, drives and automated systems.

Our solutions ensure reliable and energy-efficient ventilation performance in HVAC and industrial ventilation applications – supporting stable operations year-round.

Engineered for fan manufacturers and system integrators

Hoyer EC motors offer built-in speed control, multiple mounting options, and a compact footprint – making it easier to build smaller, quieter, and more efficient ventilation systems.

OEM benefits

- No external VFD needed
- Supports 0–10V, PWM and RS485
- Direct mounting possible = space saved
- Highly efficient – IE4 & IE5 (Ecodesign)
- Low noise level
- Compatible with axial and centrifugal fans

Typical applications

- Livestock ventilation fans
- Air handling units (AHUs)
- Data centre ventilation
- Air coolers and heat exchangers
- Other industrial ventilation applications

Specifications



Motor type

- 1-phase 220-240V supply
- 3-phase 380-480V supply



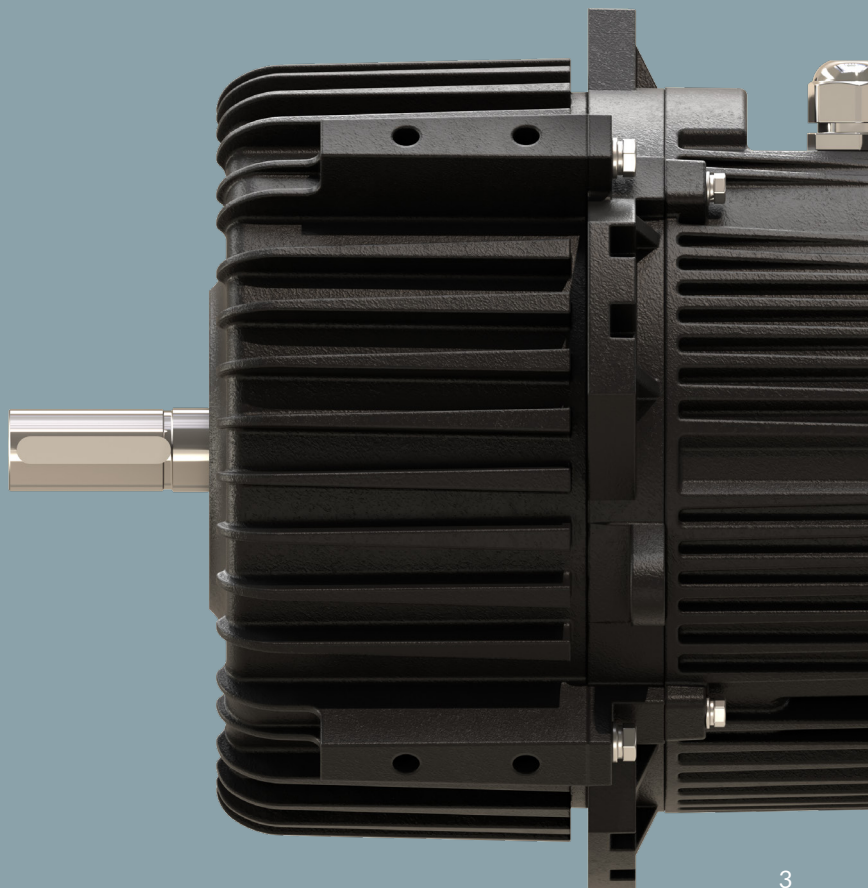
Speed

- 200-2200 rpm
(up to 3600 rpm on request)



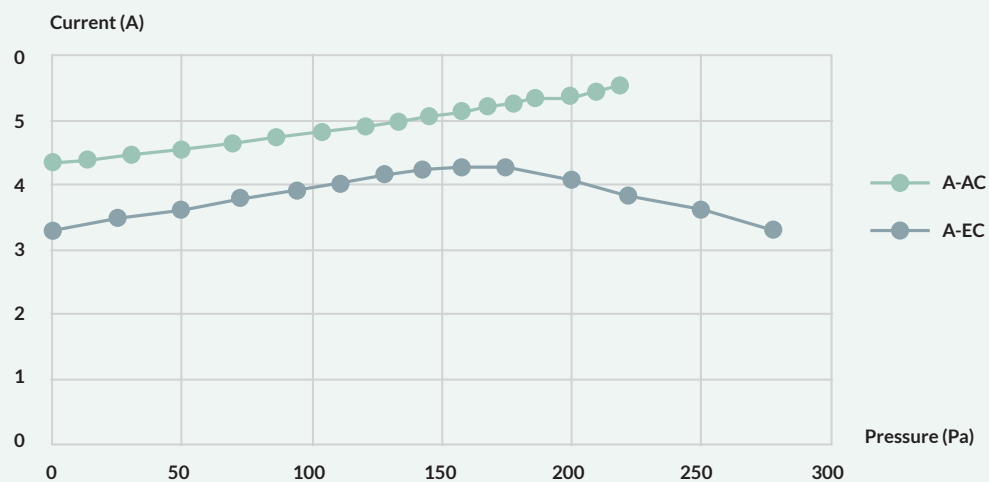
Power output

- 0.15-7.5kW



Optimise operations and save money

Current vs. Pressure



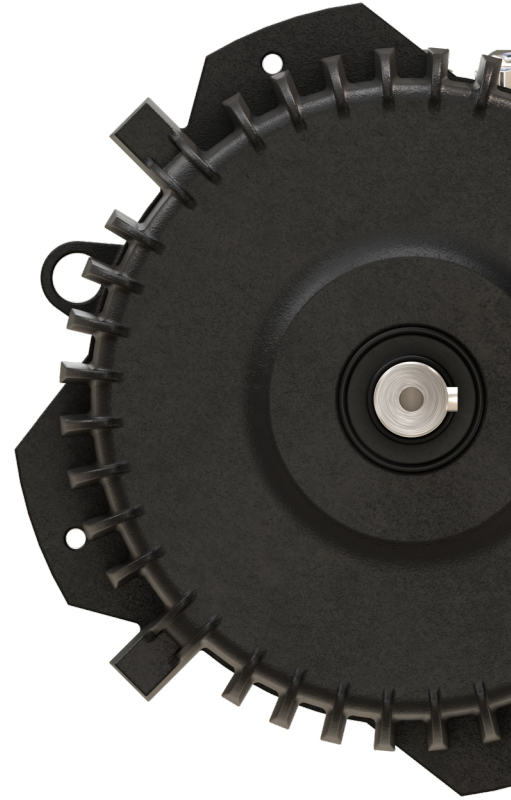
EC motors consume 20% less current than conventional IE3 motors – delivering equivalent power with lower energy use. That's real savings, every hour the fan is running. Tested at the China Agricultural University.

Hoyer EC motors cut electricity consumption by up to 20% compared to traditional AC motors.

With integrated speed control, they adapt ventilation output to match airflow and temperature needs – ensuring efficient performance at all times.

In a real-life application test, our 2.2 kW EC motor delivered significant energy savings compared to a standard IE3 motor. Depending on runtime and electricity prices, payback periods under 100 days are possible in optimal use scenarios.

The payback period when choosing EC motors can be **less than 100 days.**



Designed to reduce operating costs

Ventilation systems in farms, buildings, and industrial setups often run continuously – sometimes under demanding conditions.

Energy-efficient motors are a proven way to uncover and eliminate hidden operating costs. The Hoyer EC motor is engineered for modern ventilation needs.

Compact, durable, and highly efficient, it delivers intelligent motor control tailored for HVAC and industrial environments – helping you reduce power consumption, lower energy costs, and maintain stable airflow under all operating conditions.

- Up to 20% lower energy consumption compared to IE3 motors
- Proven reliability in 24/7 operation under high humidity and dust exposure
- Compact design makes integration easy for OEM
- Quiet operation with minimal heat generation
- Integrated speed control – no external VFD required
- IP66 protection available for dusty and wet environment

Smart control made easier. With no need for VFDs.

Unlike conventional AC motors, the EC motor uses advanced electronics instead of mechanical brushes. Its brushless design features permanent magnets on the rotor and a smart control system that precisely manages the power delivered to the motor – in real time.

Longer Lifespan. Less Maintenance.

With fewer moving parts, no brushes, and sealed electronics, EC motors offer longer lifetime and lower maintenance than traditional motors.

They are quieter and generate less heat – a key advantage in barn and industrial environments where reliability and comfort are critical.

- Fewer failures = fewer interruptions and less downtime
- High protection rating (up to IP66) for wet and dusty environments
- Corrosion-resistant coating for ammonia-heavy atmospheres
- Designed to operate reliably in ambient temperatures up to 55°C

Livestock ventilation case

Chinese pig and poultry farms operate in hot, humid, and dusty environments. That's why we designed our EC motors to handle all types of weather and operating conditions – from wet cleaning and high ammonia exposure to intense runtime.

Hoyer EC motors has been chosen for a large, high-efficiency pig farm project in China – citing return on investment, compact installation and energy savings as key factors.

Frequently Asked Questions

Q: Will it really save me money compared to my current fans?

A: Yes. Our EC motor typically saves more than 20% electricity compared to standard IE3 motors. In many cases, the investment pays back in under 100 days – depending on how many hours your fans run and local energy prices.

Q: Can it handle humidity and dust in tough industrial environments?

A: Absolutely. The motor is designed for industrial environments – with IP66 protection available, anti-corrosion coating, and temperature tolerance up to 55°C. It can handle daily washing and challenging air conditions.

Q: Do I need a VFD or external controller?

A: No. The EC motor has built-in speed control. It supports 0–10V, PWM, and RS485 signals – making it compatible with most ventilation control systems, and saving you space, wiring and cost.

Q: Will it be difficult to install or replace my existing motors?

A: Not at all. Our motors are compact and support common IEC mounting options. In many cases, they can directly replace your current motors with minimal adjustments.

Q: Will the motor be reliable in continuous use?

A: Yes. With no brushes, lower heat generation, and fewer moving parts, the EC motor runs cooler and lasts longer. That means fewer breakdowns, less downtime, and less maintenance.

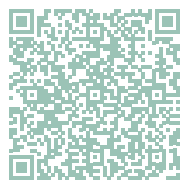
Q: Is it quiet enough for noise-sensitive environments?

A: Definitely. Because EC motors are so efficient, less energy is lost as noise and heat. The result is quieter operation – better for your working environment.

Q: What if I'm not sure which motor model I need?

A: No problem – just contact our team or your fan supplier. We'll help you select the best motor for your fan size, airflow needs, and control setup.

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Scan for more
information about the
benefits of Hoyer EC motor

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