## corimco



## Maximize Efficiency with Cofimco EC Fans



## **Corimco**®

#### EC Fans

# Redefining excellence in airflow solutions

With over 50 years of experience in the field of Axial Fans for advanced cooling systems and large airflow management solutions, Cofimco has leveraged its extensive knowledge to develop a dedicated line of EC Fans.

This product range incorporates decades of expertise in airflow dynamics and cooling efficiency, delivering cuttingedge solutions that set new standards in energy efficiency and sustainability.

## Why our EC Fans stand out

1.	Maximum Efficiency = Maximum Energy Savings	High-efficiency control work to and reducing o
	Built to Last	Engineered fo long-term perf
У К О Л К	Smart, Compact Design	Rugged yet sp center applica
63	Sustainable by Design	Optimized for your sustainat
0 - ©	Tailored to Your Needs	From industria solutions to ma



cy EC motors, aerodynamic blades, and variable speed together to optimize airflow, cutting energy consumption operating expenses. More efficiency means more savings.

or durability with robust components, our EC Fans deliver rformance, lower operational costs, and faster ROI.

pace-saving, our fans excel in HVAC, industrial, and data ations.

r airflow with minimal environmental impact, supporting ability goals.

al processes to extreme conditions, we customize natch your exact requirements.

### **Facts & Figures**

## Performance Chart – Power Map (kW) at 65 m/s Tip Speed

- High-Efficiency, Variable-Speed EC Fans for optimized performance and energy savings
- Available Sizes: 1250 mm to 1800 mm
- Precision Engineering: 3- and 4-blade configurations with extruded aluminum airfoils
- Superior Balance: ISO 21940 Grade 6.3 for minimal vibration and maximum reliability
- · Flexible Configurations: Fixed or adjustable-pitch options to meet specific airflow needs

## Large Scale and **Aerofoil Blades**



#### Static efficiency chart

- · Unmatched Efficiency: Outperforms top competitors in efficiency benchmarks.
- Size 1250: Impeller Static Efficiency at 840 RPM, demonstrating exceptional energy performance.









• Large-Scale advantage with One large fan replacing Four smaller ones, reducing energy consumption and operating costs.

• The extrusion technology enables the optimization of blade shapes, achieving exceptional levels of performance.

 NACA-shaped airfoils guarantee stall-free operation and high efficiency in a wide range of duty points.





## **Facts & Figures**

## Available configuration

- Inlet bellmouth
- Inlet/outlet flanges (customizes sizes available)
- Safety grid on impeller side or motor side
- Painted or HDG Fan stack and structure



## Dimensions

Dimensions and weight can change depending on motor size and brand.

#### Dimensions table (mm)

Unit Size	ØA	ØB	ØC	ØD	E	F	G	Weight
1250	1250	1370	1436	1476	433	520	630,5	145 kg
1800	1800	1915	1981	2021	433	520	587	180 kg

\*This dimension depends on the motor size/ model

## R&D

- Full-scale test rig and CFD analysis for performance & noise
- FEA and Test rig measurements for Vibration, Natural frequencies & Stress





## **Fields of operation**

- Data Center Cooling
- HVAC
- Industrial cooling
- Carbon Capture & Utilization (CCUS)

## **Applications**

Forced/Induced draught orientations for:

- Process Air Coolers and Air-Cooled Condensers
- Package or Factory Assembled Cooling Towers
- Hybrid or Adiabatic Coolers
- Carbon Capture and Sequestration
  (CCUS) modules



















## Fantastic<sup>®</sup> Rating Software



Proprietary rating software with an intuitive user interface for duty point input and operational parameters output. The main features are:

- · Input/output in IS or Imperial units
- Easy user interface

Input Section

- PDF-exportable datasheet
- PDF/Excel- exportable selection list

#### Motor sizes 90 - 112 - 132 - 160

IP55 / NEMA 4X Outdoor

Ultra-Premium Efficiency IE5 (motor) + High Efficiency IE2 (Drive)

Supply: 3ph x200/240 V or 380/480 V

Communication: Modbus RTU, CANopen

Certifications: CE, UL

ata Detais	Fan Curves	Torque Curve	Campbell Diagram
-0	Pn		
Fan		Pressure recovery Fan static pressure Velocity pressure Total pressure	
	Settings		( )
Installation Type Blade pitch angle	Motor u 9.5	0	Balancing Grade Pass frequency check Max residual unbalano Blade Falure Load 2 Blades Falure Load
	Drive Tran		<b>C</b>
Rotor shaft power Aerod axial force Safety Grid	5.6 430 Impeller	0.00	Rotor total weight Rotor inertia PD <sup>3</sup>
	Noise		
	91.8 d 3.0 h	B(A)	



#### corimco Fantastic 6.2.0 🚜 🗁 🛅 🖑 - | 🌣 | 🏛 🔛 🄀 🕜 🚯 | 🛷 👫 🗘 🗹 | Selected Fan Duty Point Data Project Info Customer Name COFIMCO Required Volume 38098.00 ACFM **TEST 1676** Job Name Required Static Pressure 0.6460 Inch H2O v TIP SPEED 50 m/s Job Reference Inlet Air Density 0.0670 b/ft3 Calculated Air Density from the following data 1676-4-20L Item Number 0 Oty 0 Date 25/02/2025 ~ Item Revision 115.50 °F Air Temperature EC Fans Site Elevation 1000.0 R Application Type Notes Inlet Air Humidity (0 - 100 %) **Rotational Sp** Blade Aifo Configuratio N Bla Au Prp O RPM CX Fans Min. 3 💠 Only Rigid 569.77 mm 10 Blade Tip Speed Ptch Adjustment 14L 20L 50.00 m/sec ~ 1676 3 Manual (AP) O Optimal Speed Selection Automatic (AV) 7 107553 Al I Reymsa Standard



#### **Output Section**





## **Designing for efficiency**

At Cofimco, we engineer axial fans with the future in mind. Our goal is to deliver high-performance solutions that meet diverse customer needs while optimizing resource use. By maximizing efficiency, we ensure superior functionality with minimal waste.



## **Responsible development**

We prioritize smart resource utilization, energy reduction, and continuous process optimization to lower environmental impact. This commitment drives every aspect of our design and manufacturing, reinforcing our role in advancing the industry.







#### **Cofimco – Five Decades of Excellence**

For over 50 years, Cofimco has been a leader in axial fan technology for industrial applications. We provide **tailored solutions** to major global corporations, specializing in **large-scale projects** across the extractive and energy sectors.

Renowned for quality, innovation, and manufacturing excellence, Cofimco is the trusted partner for industry leaders, delivering advanced cooling systems and high-performance airflow solutions worldwide.

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