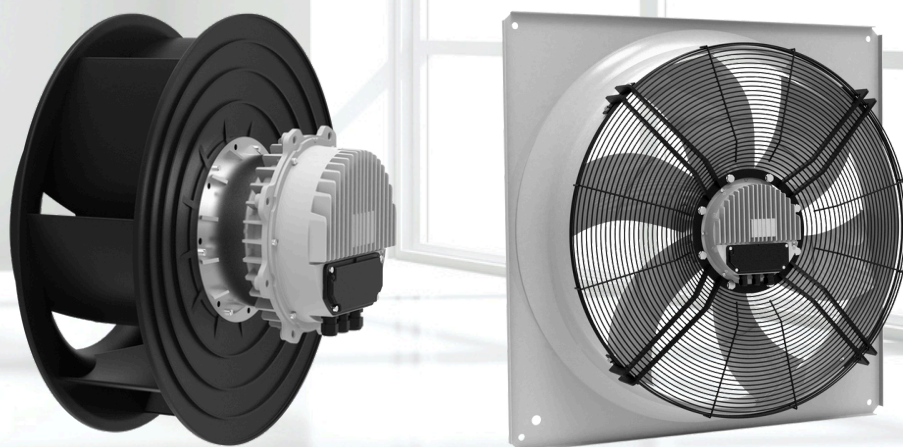


The new ErP Regulation

Guide to efficient fan technology for the
next generation - (EU) 2024/1834



A new chapter for energy-efficient fans

With the new ErP Regulation (EU) 2024/1834, the European Union is implementing a decisive further development of the existing ecodesign requirements. The efficiency standards, which were introduced in 2011, applied from 2013, and tightened in 2015, will be raised again on **July 24, 2026**, to further reduce energy consumption and promote sustainable technologies.

The regulation applies to almost all fans with an electrical input power between 125 W and 500 kW, regardless of whether they are sold individually or integrated into appliances.

One special feature: For fans that are part of other devices, such as roof fans—known as embedded fans—a transition period applies until July 24, 2027.

Why this tightening is necessary

- » Increasing demands on climate protection
- » Need for more efficient drive systems
- » Harmonization of the EU internal market
- » Reduction in resource and energy consumption
- » Improving transparency for users and integrators



What does the regulation cover?

What is new is the consistent consideration of the fan as a complete unit. The regulation defines it as an interplay between:

- » **Motor**
Electric drive, with or without control system
- » **Rotor**
The impeller generates the air flow
- » **Stator**
All air-carrying and load-bearing elements

This allows the efficiency to be evaluated as the combined result of all components – a first.

In practice, this means:

One component can compensate for the shortcomings of another—it's the system performance that counts.

Expanded focus of the regulation

- » Partial load behavior
- » Resource efficiency throughout the entire life cycle
- » Repairability and replaceability
- » More precise information and documentation requirements

Who is affected?

- » Fan manufacturer
- » Integrators / Plant Engineers
- » Importers
- » Operators of systems with fans
- » Manufacturers of devices in which fans are installed

Exceptions (excerpt):

Exceptions are ATEX fans, fans in emergency operation/short-term operation, extreme temperature ranges, and fans used in vehicles for passenger and freight transport.

Strong partners master tough challenges

A secure future with Rosenberg!

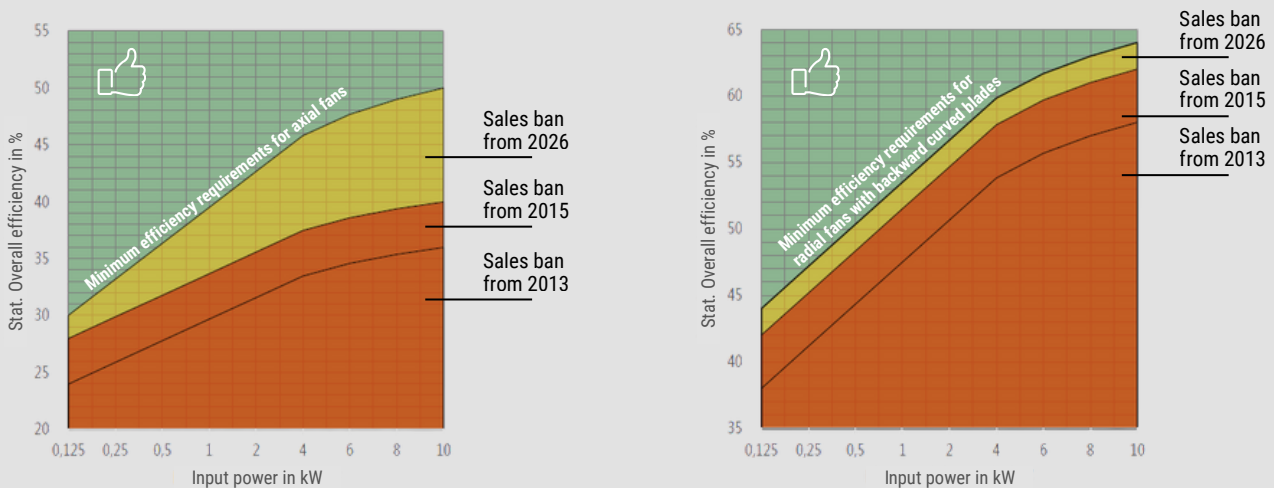


Energy efficiency requirements

The minimum efficiency levels will increase significantly in 2026. The best efficiency point (BEP) of the fan is evaluated in each case. The efficiency is calculated from the ratio of air flow to electrical power consumption.

Important: The efficiency to be demonstrated always refers to the complete system. Manufacturers or integrators must demonstrate that the required minimum values are achieved.

Graphical representation of efficiency over electrical input power in the EU



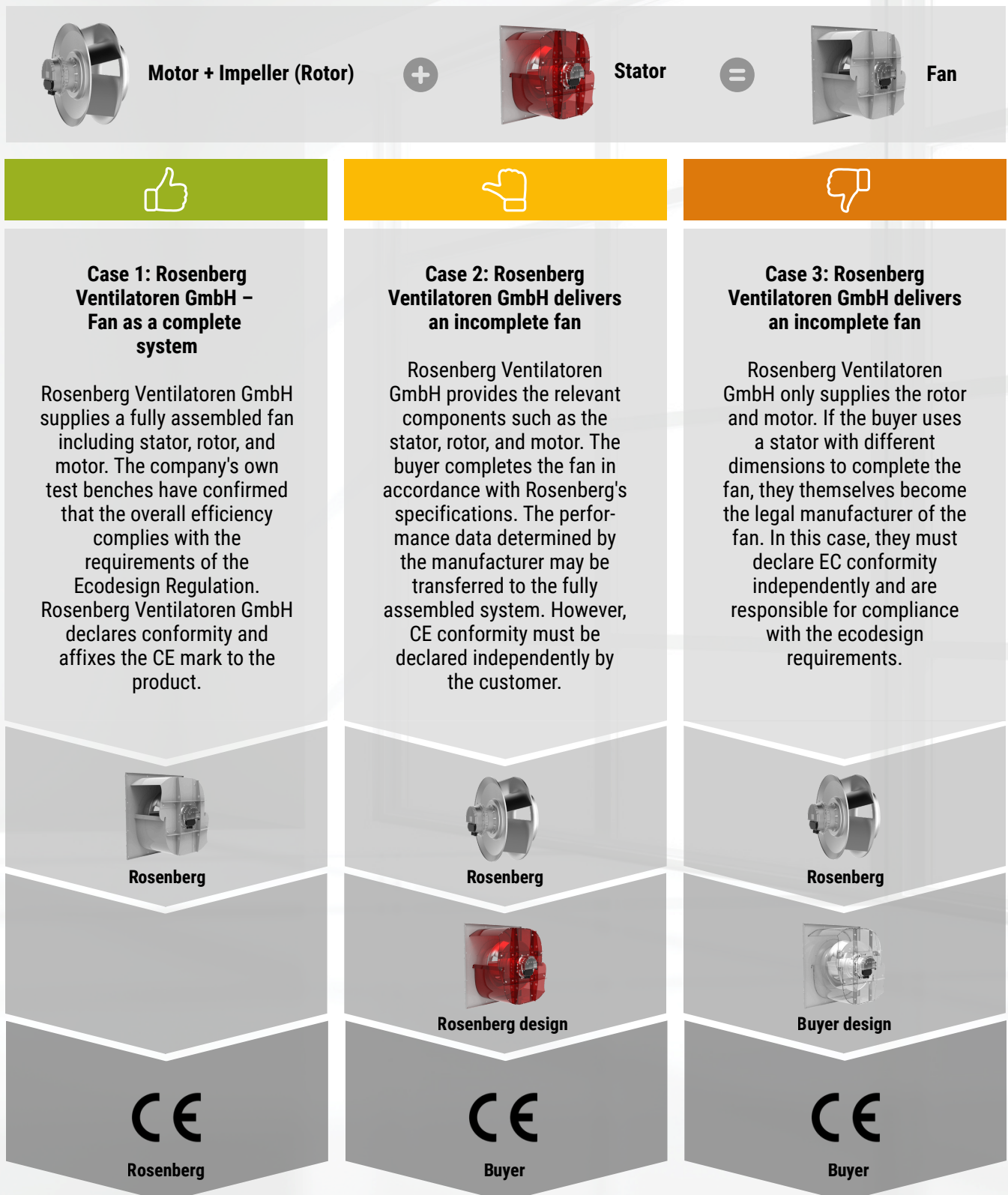
Documentation requirements

The scope of the information to be provided is being expanded. This includes, among other things:

- » Efficiency values and relevant performance data
- » technical documentation and declarations of conformity
- » Proof of compliance with minimum efficiency requirements
- » CE marking through self-declaration

Only products that meet all requirements may continue to be placed on the market in the EU. An extended transition period until **2037** applies to replacement fans, provided that they are clearly marked as replacement products.

Who assumes CE responsibility and issues the EC declarations of conformity?



Impact and opportunities

The stricter requirements also offer major advantages:

- » Significantly lower energy consumption
- » Reduced CO₂ emissions
- » Higher overall efficiency of the system
- » Potential for demand-based control and thus further savings
- » Future-proof products
- » Harmonization of European requirements

Many modern fans already comply with the new limits today.

FAQ

Do existing facilities need to be converted?

No. The regulation only applies to fans that are newly placed on the market.

How can I recognize a compliant fan?

About the CE marking and the associated declaration of conformity.

Who issues the CE declaration?

The manufacturer or distributor of the fan – this is often the integrator of the fan.

Are fans becoming more expensive?

More efficient models may incur higher costs, but they usually pay for themselves quickly through energy savings.

Does the regulation also apply outside the EU?

Only products on the EU market are affected. Many countries are adopting similar standards.

Does the regulation also apply to fans in devices that are already regulated?

Yes. This is where the “cascading approach” comes into play: the device manufacturer must ensure that the built-in fan meets the minimum requirements.

Ready for the future of fan technology

Take advantage of the ErP Regulation as an opportunity for modern, sustainable, and efficient systems.

With the right planning, you will be well prepared—for 2026, 2027, and beyond - with us at your side!



