

With the aim of reducing CO₂ emissions by 20% in 2020 and increasing energy efficiency by 20%, the European Union adopted in 2005 the EuP Directive (Energy-Using Products Directive). In 2009 this rule was called ErP (Energy-Related Products Directive), thus defining the requirements for sustainable design of energy-using products.

2020
year

+20%
renewable energies

-20%
energy use and
CO₂ emissions

When does it come into force?

The ErP Directive is being implemented in 2 steps:

- ErP 2013 - mandatory on **January 1, 2013**
It affects fans with input electrical power between 125W and 500kW
- Erp 2015 - mandatory on **January 1, 2015**
Efficiency values increased



Where is the ErP applied?

- It is mandatory in all 27 European Union countries and affects all fans that are sold or imported into Europe, or that are integrated with other equipment also imported into Europe.

How is the ErP applied?

- The full efficiency of the fan (electronic control unit, motor and blades) will be evaluated according to the minimum levels set by the European Union in the ErP. These levels are defined in the best operating points based on the input power.
- The values of the efficiency levels applied to the emergency fans, specified under Directive ErP, will be reduced by 10% for the first step (2013) and by 5% for the second step (2015).
- Products to be comply with the efficiency requirements and do not reach them, they will not have the **CE mark**.

YEAR	AXIALS		CENTRIFUGAL				
			Backward curved impeller (reaction)			Forward curved impeller (action)	
	Static	Total	Without casing static	With casing static	Total	With casing static	Total
2013	36	50	58	58	61	37	42
2015	40	58	62	61	64	44	49

Which products are affected?

The Directive affects all fans:

- with electrical input power between 125W and 500kW
- centrifugal, axial and axial-centrifugal
- equipped with a motor or not at the time of the sale or entry into service
- dual use fans designed to operate both in normal and emergency for a short time, considering the fire protection requirements laid down in Directive 89/106/EC

Are there any exceptions?

Yes. The ErP does not affect the following products:

- a) fans designed specifically for operating in hazardous areas, toxic environments, highly corrosive or flammable substances or abrasive environments;
- b) fans designed to be used only in case of emergency, for short-term operation, taking into account the requirements of fire protection;
- c) fans specifically designed to work:
 - i) when the operating temperature of the gas displaced is above 100°C
 - ii) when the operating temperature of the motor fan, if located outside the gas flow, exceeds 65°C
- d) marketed before January 1, 2015 to replace identical fans integrated in products marketed before January 1, 2013.

How does Casals collaborate with the aim 20-20-20?

All fans designed by Casals Ventilación meet the efficiency values of the ErP Directive into force from January 1, 2013 and are marked with the CE mark. Casals Ventilación ensures significant energy savings through an innovative high efficiency motors (AC and EC) technology that has been developed and is integrated into all our products.

In particular should be highlighted the permanent magnet brushless motors from Casals Ventilación, the Probat EEC. They are equipped with a technology that offers many advantages, one of which is the improvement of efficiency. A fan endowed with a EEC Probat motor is 30% more efficient than required by the ErP Directive.

