

EC Regulation N° 327/2011

According to the EC Regulation N° 623/2011, ALMECO SA will build and deliver all his fans with the new energy efficiency requirements.

Background

In June 2011, the regulation N° 640/2009 came into force, by which the new regulation on efficiency classes for electric motors is applied. This regulation was one of the implementations of the European Directive 2005/32/EC on ecodesign for energy-related products.

This Directive has since been replaced by his successor 2009/125/EC on ecodesign requirements for energy-related products, among other defining a new range of products with potential savings in energy consumption. One of these products concerns fans driven by motors with an electric input power between 125 W and 500 kW. The electricity consumption in use is the only significant parameter.

Implementation for fans

EC Regulation N° 327/2011 implements the Directive 2009/125/EC for electric motors.

Goal

Fans account for 20 % of industrial Electricity consumption or 275 TWh. The aim is electricity savings of 34 TWh in 2020.

Apply to

Fans driven by motors with an electric input power between 125 W and 500 kW.

Not applicable to fans

- Specifically designed according to ATEX (94/9/EC)
- For gas temperatures > 100°C
- For ambient temperatures > 65°C
- Where the annual average temperature of the gas or the ambient temperature < - 40 °C
- Supply voltage > 1 000 V AC or 1 500 V DC
- Specifically designed for smoke extract (89/106/EC)
- Toxic, highly corrosive, flammable or abrasive environments.
- Before 1 Jan 2015 as replacement for identical integrated fans before 1 January 2013
- Blowers with an optimum energy efficiency > 8000 rpm
- Applications with a specific ratio > 1.11 (Total pressure > 11145 Pa)
- Material handling

Requirements

The fans have to reach a minimum energy efficiency at their optimum energy efficiency point.

This minimum energy efficiency depends on:

- Fan type: axial, centrifugal with backward curved fan, ...
- Measurement category (A, B, C, D): means an arrangement where the fan is measured with free inlet/outlet conditions or is connected
- Control with or without frequency control

This information has to be mentioned on the nameplate of the fan.

Requirements and calendar

- From 1 January 2013: Fans must reach a certain efficiency degree depending on category and type (according to Annex I – Table 1 from the regulation)
- From 1 January 2015: Fans must reach a higher efficiency degree depending on category and type (according to Annex I – Table 2 from the regulation)