ErP DIRECTIVE
Ecodesign 2009/125/EC
Regulation 327/2011

READY FOR A MORE EFFICIENT FUTURE.

Soler&Palau Ventilation Group

READY
FOR A MORE
EFFICIENT FUTURE.

SOLER&PALAU, FAR BEYOND THE ErP DIRECTIVE

Over the last two years Soler & Palau Ventilation Group has been working hard to comply with the ErP Directive and specifically with regulation 327/2011 regarding fans with an electric input power greater than 125W, which officially came into force on 1/1/2013.

With the Ecodesign Directive 2009/125/EC (ErP Directive), the European Union has established a framework for setting ecodesign requirements for energy-related products. The objective of "Ecodesign" is to improve the environmental performance of products throughout the entire product life cycle by integrating environmental aspects in the product design stage and balancing such aspects with technical and economic factors.

This directive is part of the 20-20-20 targets, according to which energy efficiency should be increased by 20% and the share of energy produced from renewable resources should be increased to 20% by 2020. This directive will affect many products such as televisions, refrigerators and fans.

How will the ErP Directive be implemented?

The objective of the ErP Directive in relation to fans is to establish minimum efficiency ratings to be implemented in two stages:

From 1 January 2013, fans with an electrical input power between 125W and 500kW will have to meet specific minimum efficiency levels.

On 1 January 2015, higher efficiency values will enter into force.

These measures will affect all types of fans, with the exception of those with certain specific characteristics (mainly cabinet fans, roof mounted fans and those used in ATEX or high temperature environments, etc.). Fans that do not meet the 2013 and 2015 efficiency requirements specified in the ErP Directive cannot be marketed in Europe after these dates.

Do Soler & Palau products comply with the directive?

Most Soler & Palau products exceed the minimum efficiency requirements specified in the ErP Directive. In reality, **only 5% of our products will be withdrawn from our catalogues,** whereas generally around 50% of the fans currently available on the market are not expected to meet the 2015 ErP requirements and will need to be replaced by more energy efficient systems. However, many models will have to be modified.

READY
FOR A MORE
EFFICIENT FUTURE.

What measures are being implemented?

The Ecodesign Directive does not establish mandatory product requirements itself, but rather through the implementation of regulations adopted on a case by case basis for each product group (known as Lots). The list of product categories to which measure will apply are in accordance with a Working Plan.

The ErP Directive falls under the responsibility of the DG Enterprise and Industry (DG ENTR) and the DG Energy (DG ENER).

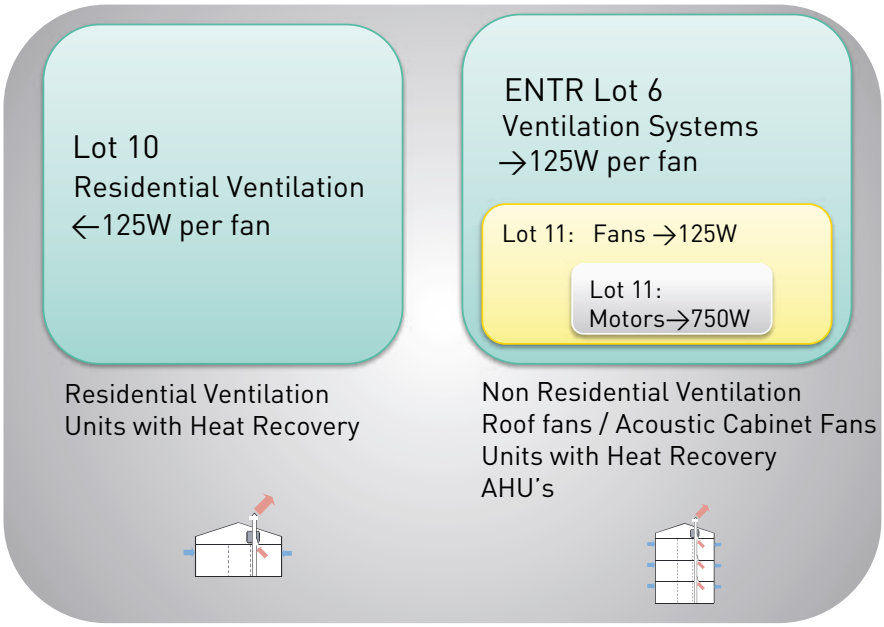
The main product groups that will affect S&P in the near future are as follows:

Existing Regulation:
ENER Lot 11 --→ Electric Motors, Fans.

Future Regulations:
Lot 10 --→ Domestic Ventilation
ENTR Lot 6 --→ Ventilation Systems

The ErP begins by affecting basic products and gradually increases its requirements to higher levels. First of all, electric motors with a nominal power of ↗ 750 W are affected by the efficiency requirements of Lot 11. From 1 January 2013, fans are affected by the specific requirements of regulation 327/2011, which also falls within Lot 11. Finally, Lots 6 and 10 will culminate in new regulations for residential and non-residential ventilation units.

DIRECTIVE ErP – S&P PRODUCT GROUPS



READY
FOR A MORE
EFFICIENT FUTURE.

What product developments is S&P currently working on?

S&P is focusing efforts on developing high efficiency products which in turn meet the requirements of the environmental regulations established by the authorities. Our R&D department has created new products and components that will reduce environmental impacts throughout the entire product life cycle, with lower energy consumption and noise levels. Our product ranges will include ECOWATT versions, many of which are already available and with others to be launched very soon.

Over the last 3 years, S&P has worked to comply with all the requirements established by regulation 327/2011 for 2013 and 2015. We are now ready to manufacture new, highly efficient and eco-friendly products. We are also updating our catalogues to include ErP data and all the necessary technical information.

What are the most important challenges facing S&P at the moment?

Our challenge is to inform our customers not only of the consequences of the ErP Directive on products, but also of the benefits that this directive will provide. Ensuring good indoor air quality will be more efficient with the use of S&P's wide product range. This will bring benefits to our customers, end users and society as a whole.

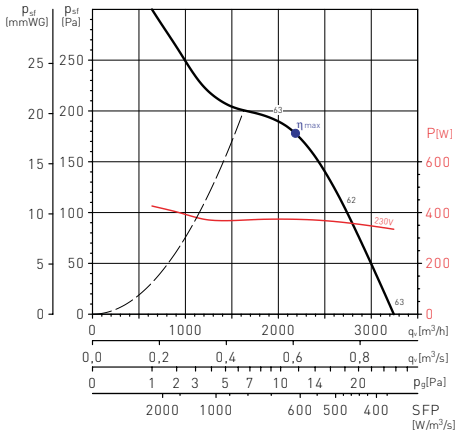
We are also adapting our catalogues to show the necessary details required by the new regulation. At the same time, we are creating a new, more modern image for our catalogues.

Here's a small preview:

PLATE MOUNTED AXIAL FLOW FANS
COMPACT Series HCFB/HCFT - PLASTIC IMPELLERS

PERFORMANCE CURVES - 2 POLES MOTORS

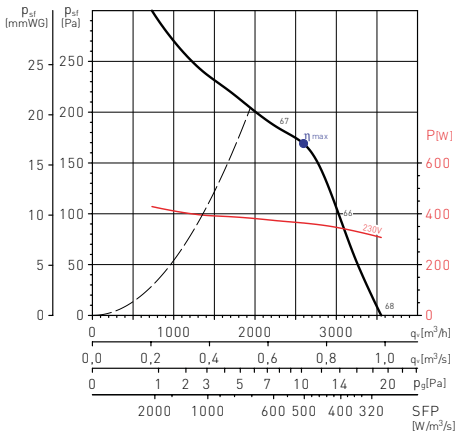
HCGB/2-315/L



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
A	Static	No	1	28,8	37,8	0,374	2182	178	2603

* See performance curve example.

HCGB/2-355/J



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
A	Static	No	1	33,8	42,9	0,364	2597	169	2590

* See performance curve example.

READY
FOR A MORE
EFFICIENT FUTURE.

What information is required by the ErP Directive for fans?

- Measurement category used to determine energy efficiency (A-B-C-D).
- Efficiency category (static or total pressure).
- Efficiency grade at optimum energy efficiency point.
- Whether the calculation of fan efficiency assumed the use of a speed controller and, if the controller is integrated within the fan.
- Performance at optimum energy efficiency point.
- Input power, flow and pressure (static or total), and rpm at optimum energy efficiency point.
- Specific ratio.

PLATE MOUNTED AXIAL FLOW FANS
COMPACT Series HCFB/HCFT - PLASTIC IMPELLERS

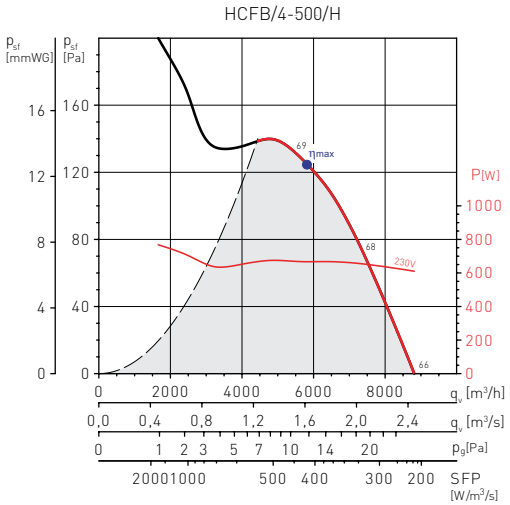
PERFORMANCE CURVES HCFB/HCFT

- q_v: Air volume in m^3/h and m^3/s.
- p_{sf}: Static pressure in mmWG and Pa.
- p_g: Protection guard pressure drop in Pa.
- SFP: Specific fan power in $W/m^3/s$.
- P: Input power in W.
- Measurement category: A.
- Efficiency category: static.
- Fan efficiency without speed control.
- Fan tested without protection guard.
- Airflow data in accordance with ISO 5801.
- Sound pressure level Lp(A) measured in a free field distance equal to 3 times the diameter with a minimum of 1,5 m.

Select the fan working point in the area of the graph right of the dashed line.

MC	Measurement category
EC	Efficiency category
VSD	Speed control: supplied with the fan
SR	Specific ratio
η[%]	Total efficiency
N	Efficiency grade
[kW]	Absorbed power
[m³/h]	Air volume
[Pa]	Static pressure
[RPM]	Speed

EXAMPLE CURVE:



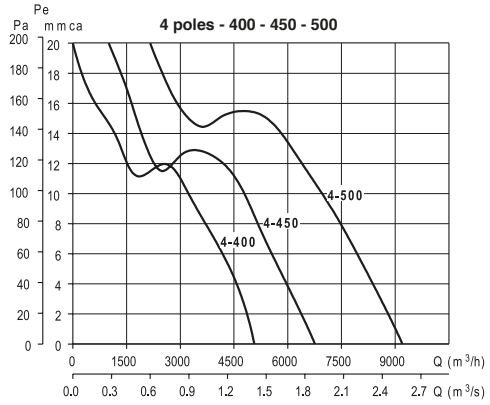
MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]	[m³/h]	[Pa]	[RPM]
A	Static	No	1	30,3	37,7	0,667	5828	125	1326

The fan information must be **visibly displayed** in:

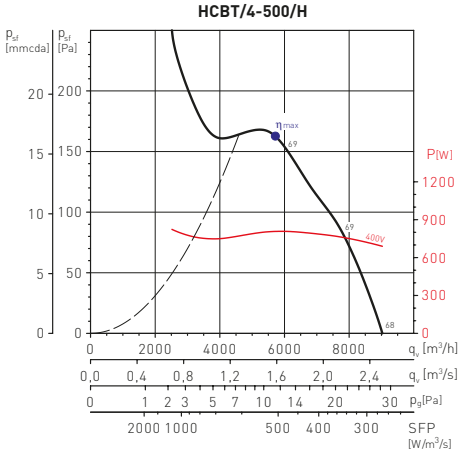
- The technical documentation for the fans.
- The free access websites of fan manufacturers.

READY
FOR A MORE
EFFICIENT FUTURE.

Before the ErP Directive



With the ErP Directive



MC*	EC*	VSD*	SR*	η[%]*	N*	[kW]		[Pa]	
A	Static	No	1	31,9	38,8	0,808	5722	163	1357

* See performance curve example.

CE Marking

Products must comply with the ecodesign requirements established in the directive measures and carry both the CE marking and the necessary associated information in order to allow introduction and free circulation on the internal market. The strict application of the measures is necessary in order to reduce the environmental impacts of regulated energy-related products and guarantee fair competition.

Products that do not comply with the requirements of the ErP Directive cannot carry the CE marking.

In case you would still have some pending questions feel free to share them with us at:
yes_to_erp@solerpalau.com