

The ErP Directive

What you should know



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With Ecodesign Directive 2009/125/EC (Energy related Products) the European Union has defined requirements for the environmentally sound design of energy consuming products. This directive is part of the 20-20-20 target, according to which energy use should be reduced by 20% and the share of renewable energies increased by 20%, by 2020. It replaces the EuP Directive 2005/32/EC, which referred to a range of electrical products, mainly end user appliances. Concrete measures will be defined through more detailed regulations but in the first stage, starting January 01, 2013, fans with input power ranging from of 125 W to 500 kW will have to meet specific efficiency values. On January 01, 2015, the second stage with higher efficiency values becomes effective.

IEC-motors

Since June 2011, IEC-motors (normally found in SEAT plastic fans, Sodeca fans and Inch blowers) have had to comply with the requirements of Directive (2009/640/EC) and have had to reach at least efficiency class IE2 (previously: eff1), new IEC motors of a lower efficiency class were no longer allowed to be marketed within the EU. Axair have already converted all fans with IEC-motors to IE2-level.

External rotor motors

External rotor motors, (normally found in Ecofit and Rosenberg products) , are not affected by Directive (2009/640/EC). However, from January 2013, all fans will have to comply with the ErP Directive for fans (2011/327/EC).

Are there exceptions?

For the time being, yes.

- Fans which have their maximum efficiency operating point at less than 125Watts (all Costech & standard ETRI frame axial fans, most Fandis fan filter kits and most Ecofit fans)
- Fans for high specification requirements such as :
 - o Explosive atmospheres (ATEX), as defined in Directive (94/9/EC6) (All Sodeca ATEX fans)
 - o Dedicated smoke extract,
 - o Ambient temperatures above 100°C
 - o Fans for railway technology or other mobile applications (All High performance & 400Hz ETRI fans)
 - o Fans used in toxic, highly corrosive or flammable environments, material handling or in environments with abrasive substances, all of which are in Axair range.
- The following end products are also currently excluded - roof fans, duct fans, tube fans and box fans.

In the future, these end products will be covered by a specific regulation. Nevertheless the motor/impeller combinations used in these fans will have to adhere to the existing efficiency values of directive (2011/327/EC) for fans.

Does existing equipment have to be retrofitted?

The answer is no. Existing equipment does not need to be retrofitted. Only fans and fan systems marketed within the EU after January 01, 2013 will be affected. There will be a transition period for replacement fans until January 01, 2015, for fans sold into the market before January 01, 2013.

Does the ErP Directive apply globally?

The Directive applies to all energy consuming products, which are commissioned and installed in the EU. It does not apply to products designated for export out of the EU.

Will fans become more expensive due to the new directive?

Costs for fans already compliant with the requirements will not increase with the introduction of the ErP Directive. There may be additional costs associated with mandatory technical modifications for some products, however a return on investment will be achieved in a short timescale by significant improvements in efficiency. Eventually, the end user benefits from a reduction in energy consumption costs and the whole environment from reduced CO2 emissions.

How to identify ErP compliant fans?

Starting in 2013 you will be able to identify fans, which are compliant with the ErP Directive by the CE symbol and efficiency data placed on the product.

In addition, all fans supplied by Axair Fans will have been checked individually, in partnership with the manufacturers. We are currently working closely with all our suppliers to ensure that each fan is tested and approved. When fans aren't ErP compliant, we will ensure that close alternatives are developed and offered to customers.

What advantages does the Directive provide for me as customer?

With the application of this legal regulation only energy efficient fans will be able to be sold in the EU. This will allow you to save up to 65% in energy costs, depending on the application and you don't need to wait until 2013, energy efficient fans, especially with EC technology, are already available.

Are all Axair Products compliant ?

We are working with our suppliers to define compliancy on all our products. Most of our suppliers already have answers on the standard ranges, and are now working on the "specials" and customer-specific designs that Axair have developed over the years. We have our own technical group responsible for ErP and liaise closely with the Fan Manufacturers Association and other responsible bodies.

What happens in cases where the fan is speed controlled?

Speed control is an important aspect of the Directive and ISO 12759 allows a compensation factor to be applied to take into account the energy saving aspects of using a Variable Frequency Drive (VFD).

VFD means an electronic power converter integrated –or functioning as one system- with the motor and the fan.

Therefore compliance may be achieved by using this compensation factor, if Axair were to supply the fan with a VFD or by instructing the client that a suitable VFD must be used. The use of VFD may not be sufficient to allow all the fans to comply.

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