EFFICIENCY OF CIRCULATORS

Directive of the European Parliament COMMISSION REGULATION (EC) No 641/2009

With the Eco-design Directive of Energy Using Products (**ErP Directive – Energy-related Products**) the European Union wants to improve the design of equipment that "consume" significant energy (e.g. televisions, refrigerators, washing machines, boilers, pumps, motors etc.) to improve eco-design providing environmental sustainability, reducing negative environmental impact as the consequence of production, use and disposal of products.

The objective of the Directive is to force manufacturers and importers to produce and distribute products with high energy efficiency, and reduced carbon output.
The criteria for eco-design will be an integral part of the declaration of conformity (**CE**), which is a necessary requirement/mark for products being sold in the EU.

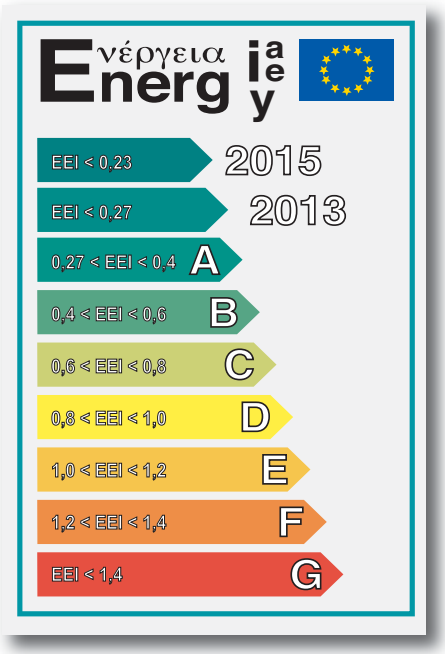
This Regulation shall apply to:

Stand-alone* or integrated** circulators with the motor immersed in the pumped medium, with hydraulic power from 1 up to 2500 W, designed for use in heating systems or in secondary circuits of cooling distribution systems.

* Stand alone circulators are commonly available on the market.
** circulators integrated in products are component of a device, such as boilers, heat pumps, etc..

This Regulation shall not apply to:

a) drinking water circulators
b) circulators integrated in products and placed on the market not later than 1 January 2020 as replacement for identical circulators integrated in products and placed on the market no later than 1 August 2015. The replacement product or its packaging must clearly indicate the product(s) for which it is intended.



This Regulation shall apply in accordance with the following timetable:

1. from **1 January 2013**, glandless standalone circulators shall meet the efficiency level (EEI) less than 0.27, with the exception of those specifically designed for primary circuits of thermal solar systems and of heat pumps;
2. from **1 August 2015**, glandless standalone circulators and glandless circulators integrated in products shall meet the efficiency level (EEI) less than 0.23.