Ecodesign Directive 2009/125/EC


Through these directives, numerous energy-related products were investigated and minimum requirements were defined. Among other things, on June 25, 2012 EU Regulation No. 547/2012 was published. It contains the requirements for the ecodesign of clean-water centrifugal pumps and is intended to facilitate implementation of Directive 2009/125/EC.

What is the objective of this Regulation?

Large quantities of water pumps are entering the market in the European Union and represent an ecologically significant consumption of energy. The EU wishes to take appropriate steps that will limit this energy consumption and consequently also CO₂ emissions. Implementation of this directive will eliminate the commercial availability of water pumps with poor efficiency.

Which IRON Pump A/S pumps are affected?

The following series of water pumps are included in the EU Regulation No. 547/2012:

- Water pump, end suction own bearing; ESOB
- Water pump, end suction close coupled; ESCC
- CNLe, (water pump, end suction close coupled inline; ESCCI)
- CNLBe and DHBe, (water pump end suction own bearing; ESCCI)
- Water pump, vertical multi-stage; MS-V

Exceptions are pump sizes with a shaft output greater than 150 kW (Article 2, Paragraph 2).

On what date will Regulation No. 547/2012 become mandatory?

- First stage mandatory starting on January 1, 2013
- Second stage mandatory starting on January 1, 2015

What are the requirements for centrifugal water pumps?

Beginning on the dates listed above, the pumps must fulfill minimum efficiency requirements with the full impeller diameter at the Best Efficiency Point (BEP), partial load, and overload conditions. The dimensionless variable "Minimum Efficiency Index" (MEI) was introduced to enable straightforward identification and comparisons of hydraulic pump efficiency. It is based on operating points at the Best Efficiency Point (BEP), at partial load (capacity 75% of BEP), and at overload (capacity 110% of BEP) and is applicable to the full impeller diameter.

The pumps must exhibit the following:

- MEI ≥ 0.10 by January 1, 2013
- MEI ≥ 0.40 by January 1, 2015

Additional information

Directive 2009/125/EC
Regulation (EU) No. 547/2012