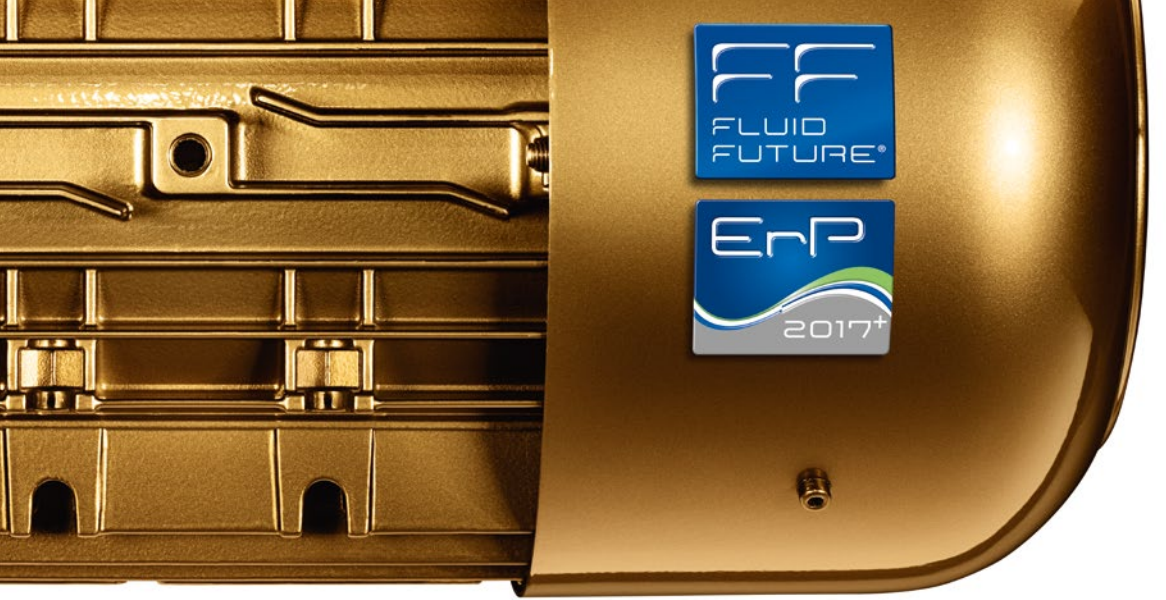

The ErP Ecodesign Regulations
Useful Information About ErP

KSB

erp
2015+
KSB
KSB

At a glance

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4. How do ErP and FluidFuture® complement each other? 18 – 23

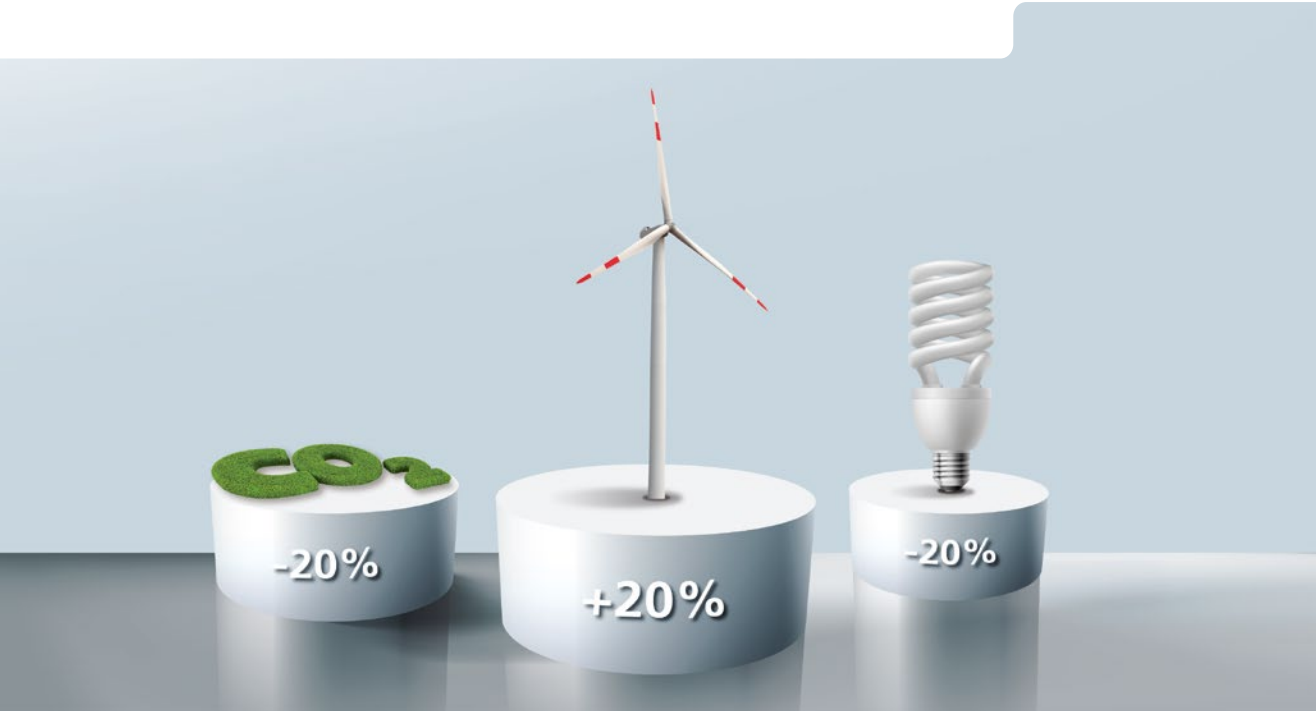
ErP
2015+

What exactly does ErP mean?

ErP is the abbreviation for “Energy-related Products”, which are products with high energy requirements – but also a high savings potential. The ErP regulations were imposed with the aim of reducing this energy consumption. They also establish the minimum energy efficiency requirements that pumps and motors must meet.

More information is available at: **www.ksb.com/fluidfuture/erp**

Pumps have a high level of savings potential: 30 % of the energy consumption in industry is attributable to pumps.


CO2
-20%
+20%
-20%

What are the goals of the ErP regulations?

The legal requirements to be met by 2020
(to achieve the aims of the Kyoto Protocol)

20% fewer greenhouse gases	20% more renewable energies	20% less energy consumption

With the high-efficiency products from KSB, you are already on the safe side.

FF
FLUID
FUTURE®
ErP
2017+

When do the minimum requirements come into effect?

Since 2013 mandatory minimum efficiency levels apply to various product groups. These levels, raised at the beginning of 2015, will gradually go up until 2020. Examples of products they apply to:

- Circulators
- Standardised water pumps
- Electric motors (regulation in force since 2011)

Ahead of its time

KSB products are so efficient, they already exceed the values required from 2015 – some of them even those applicable from 2017.

Standardised water pumps
MEI ≥ 0.40
1 January 2015
1 August 2015
EEI ≤ 0.23
Circulators

Units of measurement in energy efficiency

The minimum efficiency requirements of the ErP regulations for pumps are expressed in terms of the MEI and EEI values.

For standardised water pumps, the unit is:
MEI (minimum efficiency index): a high value = high efficiency

For circulators, the unit is:
EEI (energy efficiency index): a low value = high efficiency

Electric motors

1 January 2015

IE3 or IE2
with frequency inverter
P = 7.5 kW – 375 kW

1 January 2017

IE3 or IE2
with frequency inverter
P = 0.75 kW – 375 kW

Units of measurement in energy efficiency

Since the system of voluntary energy efficiency labelling has been replaced, the new, globally harmonised classes (IE code) are used for almost all low-voltage three-phase motors:

For electric motors, the following codes apply:

IE4 = Super premium efficiency
IE3 = Premium efficiency
IE2 = High efficiency

Which KSB products fall under the ErP regulations?

Standardised water pumps:

Etanorm/Etanorm-R, Etabloc, Etaline/Etaline-R, Etaline Z, Movitec, UPA 100C, UPA 150C, S 100D

Circulators:

Calio, Calio S

Electric motors:

KSB SuPremE® IE4* motor, variable speed standard motors, IE3 motors

*IE4 to IEC (CD) 60034-30 Ed.2

Standardised water pumps
Circulators
KSB SuPremE® IE4* motor
ErP
2015
ErP
2015+
ErP
2017+

Innovation leader technology

The standardised water pumps from KSB
exceed the minimum efficiency requirements applicable from 2015; some even fall into the category of "best available technology".

The circulators from KSB
already exceed the energy efficiency index stipulated by the ErP regulations for 2015.

The KSB SuPremE® IE4* motor
already today operates on the Super Premium Efficiency level required for drives from 2017.

*IE4 to IEC (CD) 60034-30 Ed.2

FLUID FUTURE

Energy: we spend all ours

to save lots of yours.

FLUID FUTURE®

SYSTEM ANALYSIS

Our experts analyse your system and show where you can save energy – with SES System Efficiency Service or PumpMeter.

SELECTION

Your KSB partner or KSB EasySelect will help you find exactly the right pumps and valves.

HIGH-EFFICIENCY PUMPS & VALVES

Top pump and valve performance with minimum loss – all thanks to 140 years of innovation and expertise.

HIGH-EFFICIENCY DRIVES

Our high-efficiency motors even exceed today's standards.

DEMAND-DRIVEN OPERATION

Optimised control systems like PumpDrive continuously match pump output to system requirements.

Discover potential energy savings

The ErP regulations play an important role in saving energy at component level. You can potentially save even more energy by optimising the overall efficiency of your plant with the FluidFuture® energy efficiency concept. This enables you to save money.

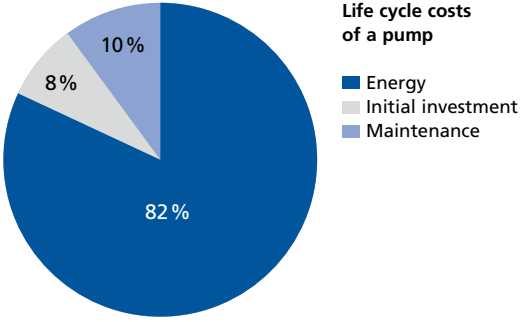
Energy-optimised plants for the future

With its high-efficiency products, KSB ensures that entire plants are made fit for the future and can make full use of savings potentials.

Example:
Replace a centrifugal pump with:

- A variable speed Etabloc PumpDrive
- Driven by an 18.5 kW SuPremE® synchronous motor

Result:
Energy saved: approx. 371 kWh/d → € 15,700 p.a.
Reduction: 1,900 tonnes of CO_2 p.a. → 74.7 per cent



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