

ALC – November 26<sup>th</sup>, 2012

**Note**

**REGULATION (EC) 640/2009**  
***Common CAPIEL / CEMEP VSD position represented in***  
***Germany by BAM***

EU Ecodesign legislation targets the efficiency of motors, but the overall energy efficiency improvement it is necessary to take into account both the motor efficiency and the system efficiency.

The topic is represented in Germany by the BAM (Bundesanstalt für Materialforschung und -prüfung), a national market-surveillance entity.

The position below is now available on <http://www.ebpg.bam.de/de/produktgruppen/index.htm> site (see useful links).

The document has the advantage of officially calling attention to the need for analyzing the application's overall energy consumption in order to determine the best technical solution in terms of energy efficiency.

**FAQ's BAM**

***Which solution shall be used from January 2015, an IE2 motor in connection with a VSD (variable speed drive) or an IE3 motor?***

***The implementing measure allows three possibilities: IE2 motors with speed control and IE3 motors with or without speed control.***

***The most energy efficient and/or most cost effective solution depends on the application:***

***For full load applications, speed control consumes more energy than direct on-line operation. In such cases an IE3 motor with motor starter is preferable. At variable loads, Variable Speed Drives can result in significant savings (valid for both IE2 and IE3 motors), if speed control is required for the given application. If it is not suitable, alternative control concepts can also be considered.***

***Regulation 640/2009 lets the user or designer of the application decide which is the best solution. This shall be determined for each individual application. For that purpose CENELEC CLC/TC 22X WG6 is developing a standard (Project number 23551 based on the mandates M/476 and M/470).***