

## MEPS – Minimum Energy Performance Standard Technical Notice for Kollmorgen Servo and Stepper Motors

Per **Directive 2009/125/EC** and **Regulation EC/640/2009**, electric motors must reach certain efficiency levels. The requirements of the MEPS directive are found in similar forms throughout the globe.

These requirements are further detailed in the following standard:

**EN 60034-30-2** Rotating Electrical Machines - Part 30-2 Efficiency classes of variable speed AC motors (IE-code).

Kollmorgen has reviewed this standard for application to its component motors, and, after consultation with industry experts, has determined, based on the scope of the standard, that its servo and stepper motors are out of scope and do not require efficiency testing or labelling.

Per the standard EN 60034-30-2, section 1, Scope:

**“Excluded from this standard are:**

...

**Motors that are designed for servo applications, i.e. applications where frequent overload or field-weakening operations or frequent speed and torque changes occur and no thermal steady state operation is reached.”**

**Kollmorgen products excluded from the scope and requirements of the standard:**

Product: All Kollmorgen Servo and Stepper motors

Servo Motors: **AKM** Motors, **AKM2G** Motors (\*), **AKMH** Motors, **Goldline** Motors, **CDDR** and **DDR** Motors, **VLM** Motors, **Housed** and **Cartridge** Motors, **KBM** Motors, **TBM** Motors, **RBE** Motors, **DDL** Motors.

Stepper Motors: **PMX** Motors, **PowerMax M & P** Motors, **PowerPac K & N** Motors, **CT** Motors, **T2**, **T**, **KM**, and **MH172** Motors, **E & H** Motors

Kollmorgen explosion proof motors are excluded by both the standard and the Directive.

For further information on the state of the art for MEPS, please see the proceedings of the 2016 (and later) Motor Summit in Zurich, Switzerland:

(\*) [https://motorsummit.ch/wp-content/uploads/2020/08/MS16\\_proceedings\\_0.pdf](https://motorsummit.ch/wp-content/uploads/2020/08/MS16_proceedings_0.pdf)

For information specifically on application of the standard to servo motors please see the section by Doppelbauer.

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Signed:

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