



iMEC Three-Phase



The world needs more efficient motors... BEST has the solution

Electric motors and the systems they drive are the single largest consumer of electricity worldwide, accounting for more than 40% of global electricity consumption.

Motors are widely used in both commercial and industrial manufacturing processes, where they can account for up to 54% of total electricity use.

BEST's Intelligent Motor Controllers (iMEC), are used to reduce the energy consumption of motors in commercial applications across the globe, often improving equipment performance and reliability at the same time.

The iMEC range of products includes controllers for single-phase and three-phase applications. For details of the other products in the Best range please contact your BEST Distributor or visit www.BestEnergySaving.com.



iMEC Saves up to 50% energy use

iMEC
INTELLIGENT MOTOR ENERGY CONTROLLER

The Problem with Motors

Motors lack the intelligence to address three key problems that lead to massive energy wastage, unnecessary carbon emissions and undue wear and tear:

- 1 Fixed speed motor driven applications like escalators cannot intelligently adjust their torque output to match load changes leading to excess energy consumption.
- 2 Motors that drive applications like pumps and fans cannot intelligently adjust their speed to match load changes and as such consume more power than they need.
- 3 When starting, a motor develops more torque than is required at full speed. This high inrush of current can lead to mechanical breakdown and peak demand penalties. To avoid the problems associated with starting, motors are often left running continuously even when they are not being used leading to huge energy waste.

The BEST Solution

- 1 iMEC can be applied to fixed speed applications and will dynamically adjust the torque output to meet load requirement without altering the speed (see fig. 1). This leads to substantial savings and is ideal for applications like escalators and many others which run at no/low load for long periods of time. In the right applications, payback is typically under two years.

iMEC provides a smooth, step-less acceleration (soft start) of your motors (see fig. 1). This dramatically reduces wear and tear on your system and helps you to avoid peak demand penalties. With a controlled start in place your motors can now be switched off without the fear of re-starting and iMEC can be programmed to perform this function automatically. Auto Switch Off delivers 100% energy savings.

- 2 iMEC can be specified to intelligently adjust the speed of your motors to match their variable loading so your motors only consume the power they need. This is a vast improvement over traditional control methods such as throttling (see fig. 2). A mere 20% reduction in speed can lead to energy savings of up to 50%.

Key Benefits:

Suitable for Most Applications

Reduces heat, noise and vibration

Extends equipment life and reduces maintenance

Improves power factor quality

Reduces energy consumption by up to 50%






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|--|-----------------------------------|
|  | Reduces Wear |
|  | Energy Saving |
|  | Motor Controllers |
|  | Reduced Maintenance |
|  | Designed & Made in the UK |
|  | Metering / Performance Monitoring |



Fig 1

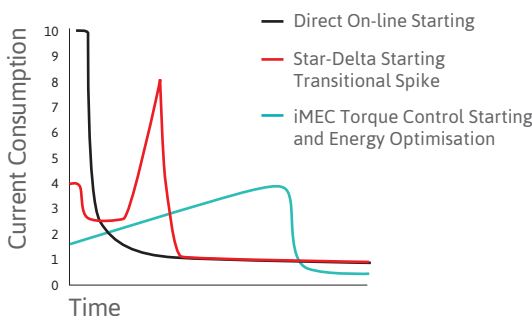


Fig 2

