



The MFE soft starter overcomes the shocks and stresses that cause mechanical failure during motor start-ups



The electronic MFE, from Fairford Electronics, is one of the most reliable, safe and cost effective means of achieving controlled starting of fixed speed electric motors. Easy to use, program and install, the MFE overcomes the shocks and stresses that cause mechanical power transmission components to fail during motor start-ups, leading to lost production and expensive equipment repairs.

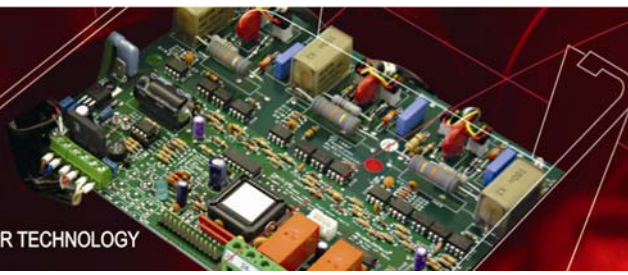
Installing the low cost MFE offers benefits in that the life of both mechanical components such as belts, chains, gears, couplings – and electrical components such as contactors, is automatically extended, not only because of fewer failures, but also as a result of reduced wear. For the user this improved reliability and operating life means more efficient production – *without interruptions*, and also cost savings from reduced maintenance and equipment replacement costs.

MFE soft starters are a highly efficient and cost effective replacement for direct-on-line (DOL) and Star-Delta methods of motor starting. They are particularly effective in applications that start and stop frequently, applying the necessary starting and acceleration torque gently, thereby avoiding mechanical shocks. In addition, the greater certainty in starting attained using the MFE means that equipment, previously left running as a safeguard against failure during starting, can now be switched off, realising substantial savings on plant energy costs.

The MFE is suitable for all types of three phase induction motors in the range from 2.2Kw to 45Kw. Offering the flexibility inherent in a fully digital architecture, the electronic soft starter equips the user with a comprehensive set of ten pre-programmed starting profiles to cater for a wide range of equipment such as pumps, fans, compressors and conveyors.



INNOVATION IN SOFT STARTER TECHNOLOGY



Although compact, the MFE packs in a host of practical user features such as a pump “kick – start” option for high breakaway torque loads, over current “shear pin” protection, multi-ramp starting and stopping, top of ramp and run relays, phase loss protection at starting, Thyristor short circuit detection and soft stop to give controlled deceleration. The latter function is particularly useful in applications where heavy dynamic loads are encountered. In pumping applications, for example, an extended ramp down time can prevent damage to pipe work systems, resulting from the adverse effects of water hammer.

The MFE's combination of high functionality at low cost means that it is the ideal unit for OEM applications – especially when employed as part of integrated control systems enclosed in panels. In these applications, the compact footprint of the soft starters reduces panel space; while simplified firing and the facility for either direct or DIN rail-mounting decreases the time required for installation. Taken together these factors cut overall installation costs, ensuring improved competitiveness for the OEM panel or machine builder.

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