RECENT TRENDS IN CONDITION ASSESSMENT OF INDUCTION MOTOR DRIVES

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ABSTRACT

The present paper highlights some of the current practices being adopted by technologists and industrialists to pre assess catastrophic faults in an induction motor drive. An overview of modern techniques such as DSP based technique like Fourier transforms, Short time Fourier transform (STFT), Wigner-Ville Distribution (WVD), Wavelet Transforms, Park Vector Technique, Gabor Transforms etc. has been presented in this paper. It has been observed that real time implementation of this process undoubtedly involves expensive tools, yet it is cost effective in the long-run resulting in savings and prevention of electrical drive system faults. The pre-fault warning & timely detection of electric drive system faults also help in prolonged life and reliability of the drive which facilitates reduction of energy and capital loss.

KEYWORDS: Induction Motor, DSP, Fault Detection, Sensors