



On line protection systems for induction motors

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Abstract

Protection of induction motors is very important since they are widely used in industry for many applications due to their high robustness, reliability, low cost and maintenance, high efficiency and long service life. So, protecting these motors is crucial for operations. This paper presents a combined protection approach for induction motors. To achieve this, the electrical values of the induction motor were measured with sensitivity $\pm 1\%$ through a data acquisition card and processed with software developed in Visual C++. An on line protection system for induction motors was achieved easily and effectively. The experimental results have shown that the induction motor was protected against the possible problems faced during the operation. The software developed for this protection provides flexible and reliable media for operators and their motors. It is expected that the motor protection achieved in this study might be faster than the classical techniques and also may be applied to larger motors easily after small modifications of the software.

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