A FUZZY LOGIC BASED RECOGNITION TECHNIQUE FOR RMS VARIATIONS CATEGORIZATION

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ABSTRACT

With an increasing usage of sensitive electronic equipment power quality has become a major concern now. One critical aspect of power quality studies is the ability to perform automatic root mean squares (rms) variations data analysis and categorizations. The various data voltage signal variations such as voltage sag, swell, interruption and normal are then classified by a fuzzy logic decision system using the fuzzified values of maximum and the minimum magnitude of the voltage component. Inherent features are extracted from the analysis of signal that taken earlier by using the reliable power meter (RPM) and fed into a fuzzy system. The categorization has been implemented using the rms variations voltage waveform and fuzzy logic toolboxes in MATLAB. The findings are reported in this paper.

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