

Leakage Current Monitoring of Distribution Line Spacers

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Abstract: - Polymeric material of distribution line spacers and covered cables can be damaged due to environment conditions. In some cases, cables can rupture representing risks to population and interruptions of the electrical energy supplied. The aim of this paper is to present results of laboratory tests, where a reasonable correlation was obtained between the stage of degradation of typical polymeric material used in distribution lines and the leakage current. In particular, the ratio of the third harmonic to the fundamental component of the leakage current can provide valuable information about the occurrence of tracking and erosion in the polymeric material.

Key-Words: - Covered cable, Erosion, Leakage current, Pollution, Polymeric material, Line Spacers, Tracking.